SWITCHING POWER SUPPLY

- Fully Automated Production Line
- Single Output : 5V, 12V , 24V, 48V, Dual & Multi Output Series Available
- Panel & Din-rail mount Series available
- Overload & Short circuit protection
- 100% full load Burn-in test
- High Efficiency
- Low Ripple & Noise
- High Quality & Reliability
- All Models available Ex-stock

MADE IN INDIA

- **ECO Din Rail Series**

- **Panel Mount Series**

- **Standard Din Rail Series**

PUMP STARTER PANEL

Types of Panel

• Single phase starter panel
• Direct on line starter
• Direct on line starter panel
• Star delta starter panel
• Auto Switch

MICRO GEAR MOTOR

• Rating : 6W TO 250W- with & without brake
• High stability
• Low temperature rising
• Multi-match ratio
• Gear head with right angle-hollow & solid

MEDIUM GEAR MOTOR

- Rating : 0.1 KW to 7.5KW
- High durability & efficiency
- Wide range of gear ratio available
- Low noise & maintenance free
- Brake facility & customization available

R-F-K-S SERIES GEAR MOTOR

- Rating : 0.12 KW to 11 KW
- High bearing capacity
- Low temperature rising
- Low noise
- Wide output torque

AC DRIVE

DELTA

MS300 series

New

High performance vector control standard compact drive

- Supports both induction and permanent magnet motors
- Removable 5-digit LED keypad, supports encoder feedback for close loop(Max. Speed 33kHz)
- Built-in 2k steps PLC function, built-in braking chopper for the entire series, built-in USB port for monitoring
- Enhanced 100% PCBs conformal coating; compliant with IEC 60721-3-3 class 3C2
- Built-in RS-485(MODBUS) communication
- Optional communication cards : Profibus DP, devicenet, modbus TCP, EtherNet/IP, EtherCAT, CAN open

Power Range

230V/1-Phase   0.25HP ~ 3HP

460V/3-Phase   0.5HP ~ 30HP

Applications :
Machine Tools, Auto Head Printing Machine, Knitting Machine, Trade Mill Application, Industrial Washing Machine, Crane / Hoist, Plastic Injection Molding Machine, Textile Machines, Woodworking Machines, Packaging Machines, Air Compressors, Pressure Boosting

C2000 Plus series

New

For general drive controls

- Supports both induction and permanent magnet motors
- Field oriented vector control (FOC) drive with Built-in 10K steps PLC Function with RTC
- Removable LCD keypad with text panels editor function
- Supports encoder/resolver feedback for closed-loop control
- Built-in braking chopper up to 40Hp
- Built-in RS-485(MODBUS) communication
- Optional communication cards :
  EtherCAT, EtherNet/IP, PROFIBUS DP, devicenet, modbus TCP, CANopen

Power Range

230V/3-Phase   1HP ~ 125HP

460V/3-Phase   1HP ~ 750HP

Applications :
Machine Tools, Textile Machines, Woodworking Machines, Ceramic Ind(ball Mill), Packaging Machines, Air Compressors, Extruders, Calender Machines, Paper Machines, Wire Drawing Machines, Power Press Machine

ME300 series

High performance drive

• Support both induction and permanent magnet motors
• Supports input 1kHz PWM or 10 kHz pulses(MI5 terminal)
• Built-in braking chopper for the entire series
• Enhanced 100% PCBs conformal coating; compliant with
  IEC 60721-3-3   class 3C2
• Built-in RS-485(MODBUS) communication

Power Range

230V/1-Phase   100 Watt(0125HP ~ 3HP
460V/3-Phase   0.5HP ~ 10HP

Applications :

Textile Machines, Solar Pump,
Packaging Machines, Fans &
Pumps, Pharma Machine

EL-W series

Compact drive

• V/F, Vector Control Mode
• 4 Multifunction inputs
• PID Feedback Control
• Built-in RS-485(MODBUS) communication
• NPN/PNP(sink/source operation mode)

Power Range

230V/1-Phase   0.25HP ~ 3HP
460V/3-Phase   1.0HP ~ 5.5HP

Applications :
Food Packaging Machines,
Conveyors, Pharma Machine,
Cup Printing Machine,
Auto Head Printing Machine,
Suitable for Small Gear Motor

CP2000 series

For fan, pumps & HVAC application

• Sensorless vector control drive with built-in 10K steps PLC function
  with RTC
• Removable LCD keypad with text panels editor function
• Built-in braking chopper up to 50Hp
• Built-in high speed communication BACnet MS/TP
• Built-in RS-485(MODBUS) communication
• Optional communication cards :
  PROFIBUS-DP, DeviceNet, MODBUS TCP and EtherNet/IP, CAN open Cards

Power Range

230V/3-Phase   1HP ~ 120HP
415V/3-Phase   1HP ~ 850HP

Applications : Fan, Pumps & HVAC application

AC DRIVE

NDELTA

EL series

New

Compact multi-function

- V/F, vector control mode
- 6 multifunction inputs
- Built-in EMI filter
- PID feedback control
- Built-in RS-485(MODBUS) communication

Power Range

230V/1-Phase	0.25HP ~ 3HP
460V/3-Phase	0.5HP ~ 5HP

Applications :
Food Packaging Machines,
Auto Head Printing Machine,
Conveyors, Pharma Machine

E series

High performance/Flexible extension micro type

- V/F, vector & PG control mode
- Built-in 500 steps PLC programming capacity
- Built-in EMI filter
- Built-in braking chopper : 230V series 2Hp~3Hp, 460V series 3Hp~30Hp
- Built-in RS-485(MODBUS) communication
- Optional communication cards
- Optional field-bus module & I/O cards

Power Range

230V/1-Phase	0.25HP ~ 3HP
460V/3-Phase	0.5HP ~ 30HP

Applications :
Machine Tools, Conveyors,
Pharma Machine, Textile,
Industrial Washing Machine,
Jet Dying Machine

C200 series

Economy vector control micro drive

- Sensorless Vector Control Drive with Built-in 5K steps PLC function
- Built-in Braking Chopper for the entire series
- Built-in pulse input terminals for encoder closed-loop control
- Special Function : High speed Frequency output up to 2000Hz
- Built-in High speed communication CAN open protocol and RS-485 (MODBUS) port for network connection

Power Range

230V/1-Phase	0.5HP ~ 3HP
460V/3-Phase	1HP ~ 10HP

Applications :
Line Speed Winder, Food Packaging Machines, Conveyor Equipment, Textile Machines, Engraving Machine, Solar Pump

TEMPERATURE CONTROLLER

DTI series

- LCD display (60 mm depth saves space)
- Input sensors : PT-100 & thermocouple inputs
- Output options : relay and voltage pulse outputs
- Single alarm relay
- Control method : PID, MANUAL, ON-OFF
- High speed sampling time : 100ms
- CE certified / IP66 protection for front panel
- Without RS485 communication

DTK series

- LCD type intelligent temperature controller
- Input temperature sensors : thermocouple, RTD
- Output type : relay and voltage pulse output
- Single alarm & two alarm options
- Control methods : ON/OFF, PID, manual
- Sampling rate : thermocouple or platinum RTD:
  0.1 second
- High speed sampling time 100 ms CE certified, UL
- With and without RS485 MODBUS Communication

DTB series

- Sensor type : thermocouple, RTD, linear voltage/current
  input
- 2 Control output : relay, current and voltage pulse
  output
- Linear voltage output
- Support dual loop control output(Heat/Cool)
- Control mode : ON-OFF, PID, manual, ramp-soak program
- Support PID auto-tuning & valve control
- 3 alarm with 13 alarm mode
- Support CT & event function
- Support RS485 communication with MODBUS ASCII/RTU
  protocol

DT3 series

- Input sensors : PT-100 & TC & analog Inputs
- Output type : relay, SSR/CT and event I/P current
  and linear voltage
- Dual output control / retransmission output
  sampling rates: 0.1S
- Remote control: Sets DT3 temperature via analog
  output of host controller
- Auto tuning / FUZZY / manual / ON/OFF
  / PID process control / self Tuning
- Heater disconnection
  detection measurable up to 100 A
- Supports timer function with alarms

DVP-SS2 series

- 32-bit CPU for high-speed processing
- Maximum I/O : 480 points
- Program capacity : 8 k steps
- Maximum execution speed of basic instructions : 0.35 μs
- Built-in RS-232 and RS-485 ports (Master / Slave)
- 4 points of 10 kHz PTO
- 8 points of HSC : 20 kHz / 4 points, 10 kHz / 4 points

DVP-SA2 / SE series

- 32-bit CPU for high-speed processing
- Maximum I/O : 480 points
- Program capacity : 16 k steps
- Maximum execution speed of basic instructions : 0.35 μs
- Built-in 1 RS-232 and 2 RS-485 ports (Master / Slave)
- Supports DVP-S series modules (left-side and right-side)
- 4 points of PTO : 100 kHz / 2 points, 10 kHz / 2points
- 8 points of HSC : 100 kHz / 2 points, 10 kHz / 6points
- SE : Built-in mini USB port, RS-485 port*2 and Ethernet port

DVP-ES2 / EX2 series

- 32-bit CPU for high-speed processing
- Maximum I/O : 256 points (DI or DO or DI+DO)
- Standard PLC DVP-ES2 series : 16 / 20 / 24 / 32 / 40 / 60 / 80 I/O points
- Analog I/O PLC DVP-EX2 : Built-in 12-bit 4AI / 2AO output; and 14-bit AIO extension modules
- Built-in 1 RS-232 and 2 RS-485 ports
- Data register: 10 k words
- Maximum Execution speed of basic instructions : 0.35 μs
- Maximum 100 kHz PTO

DVP-EH3 series

- 32-bit CPU + ASIC dual processors support floating point operations
- Programming Steps : 30K
- Maximum I/O : 512 points
- Maximum Execution speed of basic instructions : 0.24μs
- PTO : 4 axes of 200 kHz (32 / 40 / 48 / 64 / 80EH00T3)
- Supports max. 4 hardware 200 kHz HSC
- Provides up to 16 external interrupt pointers

AH560 series

- CPU : AH560-EN2-5A
- Supports redundant function (use as a general CPU)
- Shortest switch over time : 20ms
- Program capacity : 1M steps (4MB)
- Built-in two ethernet ports (switch mode) & eupports ethernet I/P DLR & RS232/RS485
- Supports SD card (max : 32GB)
- CPU redundancy
- Power module redundancy
- Main back plane redundancy
- Communication redundancy for expansion back plane
- Communication redundancy of RIO with ethernet I/P DLR

AS300 PLC series

- CPU : AS332T-A / AS332P-A / AS324MT-A with SD card slot
- Built in ethernet, USB & two RS485 ports
- Built in 6-ch HSC (200KHz) & built in 6 Ch PTO (200KHZ)
- Program capacity : AS300-128K steps
- Supports two function cards
- Maximum 32 modules (16 Analog) including remote io modules (maximum 1024 Ios)
- RTC battery for accurate time & Faster execution speed

AS200 series

- CPU : AS228T-A / AS228P-A / AS228R-A with SD card slot
- Built-in CAN port & Ethernet Port & Two nos. RS485 port & USB port
- Built-in 16 DI / 12 DO with Spring Terminal Block
- 4-ch High Speed Inputs (200KHZ) & 6-ch High Speed Outputs (200KHZ)
- Program Capacity – 64K Steps
- Doesn't Support Function Cards

ENCODER

ES3/ES5 series

- Compact, rugged incremental encoder
- Available in 6mm and 8mm solid shaft diameter
- Outer diameter is 37mm and 50mm
- High resolution from 100PPR to 2500PPR
- Open collector, line driver, Push-pull & voltage type outputs
- Input supply range : 5V, 5~12V & 7~24V
- Maximum frequency response : 300 kHz
- Maximum rotational speed : 6000 RPM

EH3/EH5 series

- Compact, rugged incremental encoder
- Available in 8mm hollow shaft diameter
- Outer diameter is 37mm and 50mm
- High resolution from 100PPR to 2500PPR
- Open collector, line driver, push-pull & voltage type outputs
- Input supply range : 5V, 5~12V & 7~24V
- Maximum frequency response : 300 kHz
- Maximum rotational speed : 6000 RPM

AS5 series

- Compact, rugged absolute encoder
- Available 8mm solid shaft diameter
- Outer diameter is 50mm
- High resolution : 5-bits to 10-bits
- Gray code, binary code outputs
- Input supply range : 5V & 5~12V
- Maximum frequency response : 20 kHz
- Maximum rotational speed : 3000 RPM

CS7 series

- Heavy duty Incremental encoder for spindle application
- Available in 15mm solid shaft diameter
- Frame size 68mm ; PCD 56mm
- Encoder resolution 1024 PPR
- Line driver type output
- Input supply range : 5V & 5~12V
- Maximum frequency response : 300 kHz
- Maximum rotational speed : 8000 RPM

TP02 / 04 series

Text panel display

- Resolution: TP02 : 160 x 32 dots, TP04G-AS2 : 128 x 64 dots & TP04G-AL2 : 192 × 64 dots
- Built in 256 KB flash memory
- 16 user-defined keys (TP02 series)
- 12 user-defined keys (TP04G-AS2 series)
- 9 user-defined keys (TP04G-AL2 series)
- 2 communication port
- Back light auto turnoff settings
- Built in RTC & password function

TP08 series

Text panel display

- STN LCD size : 3.8"
- Resolution : 240 x 128 dots (TP08 series)
- Built in 1024 KB flash memory
- 24 keys user-defined keys
- 2 communication port
- Back light auto turnoff settings
- Built in RTC & password function
- Support recipe & macro function

TP04P series

Text panel display with plc

- Adopts the core of the DVP-SS2 Series PLC :
- program capacity : 8 k steps / D device : 5k words
- Provides 2 sets of 10k Hz high-speed pulse input (excludes TP04P-08TP1R)
- 4.1" STN-LCD
- Provides 0~9 numeric keys with user-defined function
- Built-in USB port for program upload/download
- Built-in RS-485 port*2
- Supports modbus ASCII/RTU modes
- User-defined boot screen available
- Built-in real time clock (RTC)
- Digital and analog I/O terminals available

DOP-W series

- 1GHz high speed processor for higher computing performance
- Aluminum enclosure : greater vibration resistance and higher tolerance for ambient environments compared with plastic enclosure.
- 1024 x 768 pixels high resolution and high brightness display (W127B: 500 cd/m², W157B: 450 cd/m²)
- 256MB Flash ROM
- Highly reliable touch panel with min. 10,000,000 touches
- The built-in stereo amplifying speaker provides efficient alarm notifications. No additional speaker is required.
- Supports 2 COM Ports / 2 Ethernet / 3 USB Host
- Supports SD card
- Apart from traditional mounting, DOP-W also supports the VESA standard mounting interface making wall mounts easier

DOP-100 series

BASIC / STANDARD / ADVANCED

- Cortex-A8 800MHz CPU/dual 16Hz(12"&15")
- Brightness : 400~500 cd/m2
- Embedded linux operating system and supports LUA language
- Operational log data function & PDF/TFT reader and PDF printer supported
- CE & UL certified & IP65 rating front case
- Operating temperature: 0~50 degree centigrade

BASIC HMIDOP-103BQ

- 256MB RAM & 256MB ROM
- 1 COM port & USB host & USB client

Standard HMI : (C Type & E Type)

- DOP-107CV/DOP-110CS/DOP-107EV
- 256MB RAM & 256MB ROM
- C Type : 2 COM ports & E-Type : 2 COM ports+1 Ethernet Ports & USB Host & USB Client
- Brightness : 300~400 cd/m2
- FTP/eMail supported : simple data transmission and real-time status report
- CSV File / PDF file can be send through email
- Power Isolation (C & E both types) and communication port Isolation (E Type only)
- PCB coating moisture and dust proof
- 14 different languages supported
- NTP function, web monitoring function

Advanced HMI : (W Type)

- DOP-103WQ/DOP-107WV/DOP-110WS/ DOP-112WX/DOP-115WX
- M Type : multimedia function DOP-112/DOP-115MX
- W : 512MB RAM & 256MB ROM / 12" & 15": 1GB & 8GB
- W : Type: 2 COM ports & E-Type : 2 COM ports + 1 ethernet ports & USB host & USB client
- Narrow frame design & brightness : 450 cd/m2
- FTP/eMail supported : simple data transmission and real-time status report
- CSV File / PDF file can be send through email
- Power Isolation and communication port Isolation
- PCB coating moisture and dust proof
- 14 different languages supported
- NTP function, web monitoring function,
- M Type : analog camera, IP camera, VGA Input, video play, event trigger for image and video capturing

AC SERVO SYSTEM

ASDA A2

- Rated output : 1Ph/3Ph - 200V : 50W to 15.0 KW
  3Ph - 400V : 400W to 15.0 KW
- Rated torque : 0.16 Nm to 95.5 Nm
- 20-bit incremental & 17-bit absolute encoder resolution
- position/ internal position/ speed and torque control modes
- 1.0 KHz velocity response frequency
- 4Mpps exclusive interface for line driver pulses
- Maximum 5000 RPM
- Maximum torque limit 300%
- Full close control with linear scale or external encoder
- Built-in electronic cam (E-CAM) function
- EtherCAT, CANopen, DMCNET communication
- Excellent solution for rotary cutter and synchronized motion
  applications
- CE & UL safety standard compliance
- IP 65 (except connector)

ASDA B2/B2L

- Rated Output : 1Ph/3Ph - 200V : 100W to 3.0 KW
- Rated Torque : 0.32 Nm to 19.1 Nm
- 17-bit Incremental encoder resolution
- Position/ speed and torque control modes
- 550 Hz velocity response frequency
- 4Mpps exclusive interface for line driver pulses
- Maximum 5000 RPM
- Maximum torque limit 300%
- RS-232/ RS-485 MODBUS Communication
- CE & UL safety standard compliance
- IP 65 (except connector)

AC SERVO SYSTEM

Panasonic

MINAS A6

- Rated output : 1Ph/3Ph - 200V : 50W to 22.0 KW
- Rated torque : 0.16 Nm to 140.0 Nm
- 23 bit absolute / Incremental encoder resolution
- position/ internal position/ speed/ torque & full close control modes
- 3.2 KHz ultrafast velocity response frequency
- 8Mpps exclusive interface for line driver pulses
- maximum 6500 RPM
- Maximum torque limit 350%
- RS-485/ RS-232 MODBUS-RTU communication
- Support 256 Internal position through digital Input & MODBUS communication
- Quadrant projection suppression function
- Detachable keypad
- Compact motor size
- Low cogging torque
- Advance PANATERM software for PC Interface
- Motor sizing software
- CE & UL & european safety standard compliance
- IP 67 (except connector)

MINAS A6B EtherCAT

- Rated output : 1Ph/3Ph - 200V : 50W to 22.0 KW
- Rated torque : 0.16 Nm to 140.0 Nm
- Support 23-bit absolute & incremental type servo motors
- cyclic & profile position/ velocity/ torque & full Close control modes
- 3.2KHz velocity response frequency
- Minimum communication period 0.125ms
- Communication speed 100Mbps full-duplex
- Support network communication "EtherCAT"
- Anti-vibration filters are available
- Fast & highly accurate operation
- Configuration max. Rotation speed 6500 rpm
- Precise position latch & comparing
- High performance & low cost
- IEC safety I/F model available

MINAS LIQI

- Rated output : 1Ph/3Ph - 200V : 200W to 1.2 KW
- Rated Torque : 0.64 Nm to 5.6 Nm
- 10000 ppr encoder resolution
- Support position control mode only
- 1.0 KHz velocity response frequency
- 500 KHz exclusive interface for line driver pluses
- Maximum 5000 RPM
- Maximum torque limit 300%
- Advance PANATERM software for PC Interface
- Android application for smart phones
- Motor sizing software
- CE & UL safety standard compliance
- IP 65 (except connector)

MINAS A6N RTEX Realtime Express

- Rated output : 1Ph/3Ph - 200V : 50W to 22.0 KW
- Rated torque : 0.16 Nm to 140.0 Nm
- Support 23-bit absolute & incremental type servo motors
- Cyclic & profile position/ velocity/ torque & full close control modes
- 3.2KHz velocity response frequency
- Minimum communication period 0.0625ms
- Communication speed 100Mbps full-duplex
- Support network communication "RTEX"
- Precise position latch & comparing
- Easy device development
- High performance & low cost
- Support Infinitely rotatable absolute encoder
- High efficiency ring topology
- IEC safety I/F model available

SPEED REDUCER

VRXF Series

- New gear design with a fully-complementing roller bearing structure for increased torque transmission
- Maximum high input speed at 6,000 spm
- High-performance grease for higher efficiency
- 3 backlash levels available
- Compatible with all types of servomotors with the use of adaptors
- Grease replacement is not required throughout the product's lifetime; can be installed at any desired angle without worry of leakage.

- Reduction Ratio : 1/3-1/81
- Backlash (3 Types) :
  PB: 0.05° (below 3 min)
  LB: 0.08° (below 5 min)
  Standard: 0.25° (below 15 min)
- * LB: 166° (below 10 min) for Frame B in the spec table

VRL Series

- Industry standard mounting dimensions
- Large variety of frame sizes and ratios
- Thread-in mounting style
- Best-in-class backlash (<5 arc-min)
- Ships in 48 hours in standard frame sizes

APPLICATION
- An excellent choice when very requiring good accuracy and re-liability at an exceptional value
- These planetary gear-head are the perfect solution for servomotors applications such as gantries, injection-molding machines, pick & place automation and linear slides

HYDRAULIC PUMPS

INTERNAL GEAR PUMP

- Flow rate (cc) : 32, 40, 50, 64, 80,100,125 cc

- Maximum rotating speed : 3000rpm

- Internal gear pump with axial & radial gap compensation

- Suction & pressure port radial

- Low noise

- Low pulsation (pressure pulsation ~ 2%)

- Fast reverse rpm allowed : max < 400.

Sunny

HELICAL GEAR PUMP

- Flow rate (CC) : 32, 40, 50, 63, 75, 90 cc

- Maximum rotating speed : 3000RPM

- Low noise also at high speed

- Energy saving during part load & no load running condition

- Intermittent operation at high pressure & low speed

- Very high volumetrical efficiency

- Fast reverse RPM allowed : max < 400

SETTIMA®

INDUSTRIAL COMPUTER

IS 13252(PART 1):2010/
IEC 60950-1 : 2005

R-72004316

- Embedded Industrial Touch Panel PC (TPC), Automation Panel PC(PPC), Rack mount chassis PC, BOX PC which can be used for wide range of industrial application
- Varieties of Sizes available: 5.7",6.5",10",12",15",17",18.5", 21.5" & 23.8"
- Varieties of Motherboard : SBC, Mini-ITX / Mirco ATX, ATX / Server Board
- Varieties of Intel processors: Intel Atom, Dual core, Core2 Duo, Core2 Quad, Celeron mobile, Intel core i3, i5, i7 & Intel Xeon Processor
- Variety of OS support including : WES Server/ WES10/8/7, WinXP/XPe, WinCE and Linux
- Extremely rugged design with die-casting bezel & Aluminium housing
- Wide temperature range -20deg ~ 60deg for harsh environment
- Front panel: NEMA4, IP65 certified & 2KV Isolation protection
- BIS certified Computer range

INDUSTRIAL EMBEDDED FANLESS BOX Pcs

- Varieties of Intel processors: Intel Atom, Dual core,Core2 Duo, Core2 Quad, Intel core I3, I5, I7, Celeron mobile
- 4 x GbE support IEEE 1588, 2 x USB 3.0 super-speed ports
- 4 x DI, 4 x DO, 4 x RS-232 / 485 / 422
- DP + VGA dual display outputs
- Dual power inputs and wide temperature
- iDoor technology support with PCI/PCIe Slot
- Extremely rugged design with die-casting bezel & aluminium housing
- Front panel: NEMA4, IP65 certified
- IEC 61850-3 and IEEE 1613 certified substation computers
- Class I, division 2 certification for oil & gas

WEBACCESS SCADA

- 100% web-based solution
- Client view support for mobile & PC
- Ample Driver Support - Web Access support hundreds of devices
- Open real-time data connectivity : OPC UA/DA, Modbus, BACnet, DDE Server
- IEC-104, DNP3 Power protocol support
- Open offline data connectivity : SQL Server, Oracle, MySQL, MS Access Database
- Redundant SCADA & Communication Ports
- Google Maps and GPS Location Tracking
- HTML5 dashboard support
- Support Customize Report
- TCL, Java ,VB script support
- Remote access to alarms, Data and E-mail alarms, SMS alarm notification
- Support LonWorks LNS and BACnet IP
- Web-enabled video and audio integration
- MQTT driver support for IoT Application
- Special Tools for Schenduler and EMS System
- Customize graphic option

WebAccess

INTELLIGENT TRANSPORT SYSTEMS

Advantech offers a full product range for rail and roadway applications, such as railway automatic fare collection, wayside control, rolling stock, urban traffic management, highway management, and transportation hub management

- EN50155 Compact Fanless System
- 28/ 16/ 12/ 10/ 8-Port EN 50155 Rolling Stock Switch
- EN 50155 Passenger Information System Panel PC
- EN 50155 Railway Panel Computer
- EN 50155 Rolling Stock NAT Router for Ethernet Train Backbone

Rolling Stock Controller   EN50155 Compliance Switches

Wayside Controller   PIS System

STEPPER MOTOR

Tamagawa

NEMA 17

- Small size motor with high torque
- Driving step angle 1.8 degree/pulse
- Rated current per phase 0.3 to 1.4 AMP
- Holding torque 0.16 Nm to 0.883 Nm
- Winding bipolar/unipolar both available

NEMA 23

- Medium size motor with high torque
- Driving step angle 0.9 & 1.8 degree/pulse
- Rated current per phase 1.0 to 5.0 AMP
- Holding torque 0.39 Nm to 2.0 Nm
- Winding bipolar/unipolar both available

NEMA 24

- Extra medium size motor with high torque
- Driving step angle 1.8 degree/pulse
- Rated current per phase 1.0 to 4.0 AMP
- Holding torque 0.75 Nm to 2.2 Nm
- Winding bipolar/unipolar both available

NEMA 34

- large size motor with high torque
- driving step angle 1.8 degree/pulse
- rated current per phase 3.2 to 6.4 AMP
- holding torque 2.5 Nm to 10.6 Nm
- winding bipolar/unipolar both available

STEPPER DRIVER

- Range of operating voltage : 24~85V DC & 110~230V AC
- Range of current : 0.6~12.0 Amps
- Microstepping range : 400, 800, 1600, 3200, 6400, 12800 steps/revolution
- Support CANopen, EtherCAT communication
- High efficiency CHOPPER with MOSFET final stage output
- Electronic damping facility for further acoustic noise & mechanical vibrations reduction

TYPES OF STEPPING DRIVES

STEP & DIRECTION

ADVANCED

ANALOG INPUT

PROGRAMMABLE

CANopen

EtherCAT®

ENERGY SAVING SERVO SYSTEM

Inovance

	Model Number	50LPM	64LPM	80LPM	100LPM	125LPM	150LPM	180LPM	200LPM	250LPM
PUMP	Pump Rate (cc)	28	32	40	50	63	75	90	100	125
	Pressure (bar)	160 / 180								
MOTOR	KW (S1)	10.5/12	12/15.7	15.7/19.3	19.3/24.1	24.1/31.4	31.4/35.6	35.6/35.6	35.6/48.2	48.2/59.7
	Rated RPM	2000								
	Max. RPM	2500								
DRIVE	KW	11/15	15/18.5	18.5/22	22/30	30/37	37/37	37/45	45/55	55/75
	Rated Amp	25/32	32/37	37/45	45/60	60/75	75/75	75/90	90/105	105/150

FIELD BUS - OPTIONAL

TYPICAL APPLICATION

Injection Molding Machine   Insert Injection Molding Machine   Hydraulic Power Press Machine