

HNC Electric Brochure 2018



About HNC Electric

HNC Electric is an automation & drive focused global company, providing global customers with control, display, drive and system solutions & other related products and services, under the support of its excellent electrical and electronic technology as well as strong control technical force.

HNC Electric listen and understand our clients requirement, by improving and upgrading our product functions and performance continuously , we provide and develop perfect products and solutions according to different requirement of the industry. Our products have been used and applied successfully in packing, printing, textiles, plastic injection, elevator, machine tool, robot, wood cutting, stone carving, ceramic, glass, paper making industry, crane, fan & pump, new energy resources etc.

In order to provide more complete service and product for our customers internationally, meeting our customer expectations in the respect of time of delivery, solution support, after sales services and product customization support, HNC Electric has been searching for capable companies as our business partners, product agents and distributors, bringing good product quality and professional service to our clients globally. Up until now, we have already got customers and business partnerships built up in over 40 countries, which include Europe, North America, South America, Asian-pacific region, Middle East and Australia etc.

The superior quality and low cost of HNC Electric's product are benefited from the mature and complete manufacturing system and the efficient logistic of China. Our talented and sufficient manpower, our rich engineering experiences, drives our product to be more complete and better in the respect of functions and performances.

HNC Electric, your professional electrical partner !

Mission & Vision

To give our customers a competitive products and solutions in automation industry.
To integrate and value the national automation industry while supplying one-stop service to the worldwide customers.

To be a leading venture in automation industry based on honesty and innovation philosophy.



Contents

Programmable Logic Controller

4	HC-A1	5
	HC-A2	
	LX1S	
	LX1N	
	HC-A8	
	HC-A8C	
	HC-A2C	

Expansion Modules

6	HCA8C
	TX1N
	TX2N

CNC Controller

180XP Series	7
HNC-8 Series	

Human Machine Interface

8	TP2000 Touch Screen
	Text Panel

Servo Motor / Drive

9	HSD3	10
	HSD2	
	HSV-180AD	
	HSV-180AS	
	HSM	
	G M 7	

Variable Frequency Drive

11	HV390	12
	HV450	
	HV590	
	HV580	

Soft Starter

12	HHS Soft Starter
-----------	------------------

Medium Voltage AC Drive

HMV1000 series	13
----------------	-----------

Planetary Gearbox **14**

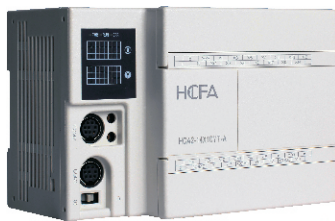
Programmable Logic Controller

HC-A1 Series Economic Standalone Micro PLC



Controllable I/O: 10~30 points, Main Unit I/O : 10/14/20/30 points
 Fully compatible with Mitsubishi FX1S
 Compact design for small installation space
 Built-in two Interface (RS422 & RS485/RS422)
 2 pulse train outputs (100KHz) for transistor unit (MT)
 Integrated power supply (AC or DC powered)
 Maintenance-free EEPROM memory
 Built-in positioning control
 Integrated real-time clock

HC-A2 Series Economic Expansionable Micro PLC



Controllable I/O: 14~128 points, Main Unit I/O : 14/24/40/60 points
 Built-in two Interface (RS422 & RS485/RS422)
 Fully compatible with Mitsubishi Fx1N
 Provide I/O, analog & communication expansion
 2 pulse train outputs (100kHz) for transistor unit (MT)
 Expandable terminal-type I/O
 Add-on analog control and communication functionality
 All DC powered models support 12V to 24V power supplies
 Integrated real-time clock
 System flexibility with expansion boards, special adapters, extension I/O, and special function blocks

LX1S Series programmable logic controller



Economic Standalone Micro Control for general applications
 Controllable I/O: 10~30 points, Main Unit I/O : 10/14/20/30 points
 Fully compatible with Mitsubishi FX1S
 Compact design for small installation space
 Built-in two Interface (RS422 & RS485/RS422)
 2 pulse train outputs (100KHz) for transistor unit (MT)
 Integrated power supply (AC or DC powered)
 Maintenance-free EEPROM memory
 Ample memory capacity (2000 steps) and device ranges
 Built-in positioning control

LX1N Series programmable logic controller



Economic Expansion Micro Control
 Controllable I/O: 14~128 points, Main Unit I/O : 14/24/40/60 points
 Built-in two Interface (RS422 & RS485/RS422)
 Fully compatible with Mitsubishi Fx1N
 Provide I/O, analog & communication expansion
 2 pulse train outputs (100kHz) for transistor unit (MT)
 Expandable terminal-type I/O
 Add-on analog control and communication functionality
 All DC powered models support 12V to 24V power supplies
 Integrated real-time clock
 System flexibility with expansion boards, special adapters, extension I/O, and special function blocks

Programmable Logic Controller

A8 Series programmable logic controller



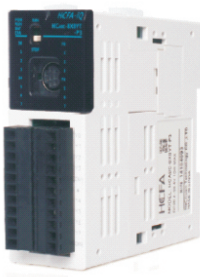
Ultra-high speed small PLC, dual core processor
 Controllable I/O: 16-384 points (with CC-Link remote I/O),
 Main Unit I/O: 16/32/48/64/80/128 points
 Built-in 4 Pulse Train Outputs (100KHz / 200KHz)
 Built-in 6 100kHz & two 10kHz high speed counter
 Built-in 3 Communication Ports (RS422, RS232, RS485)
 Built-in 64K Flash ROM
 Built-in high speed processing and positioning
 Exchangeable communication expansion boards that mount directly into the main unit (USB, RS-232C, RS-422, RS-485)
 Simultaneous memory cassette and display module mounting available
 Integrated real-time clock
 Easy programming with large instruction set and table positioning configuration

A8C Series programmable logic controller



Ultra-high speed small PLC, modular design
 Main Unit I/O : 16/32 points
 Controllable I/O: 16 points (Terminal block type)
 32 points (Connector type)
 8 relay input/ output points, built-in 2 communication ports
 8 (16) transistor input/ output points. No positioning, built-in 2 communication ports
 8 transistor input/ output points, 2~4 Pulse Train Outputs (100KHz) , 2 communication ports
 8 transistor input/ output points, 4-axis differential 200KHz, 2 communication ports
 16 transistor input/ output points, 2~4 axis positioning, 2 communication ports
 16 transistor input/ output points, 4-axis differential positioning, 2 communication ports

A2C Series programmable logic controller



High speed micro PLC, modular design
 Main Unit I/O : 8 DI / 8 DO (replay or transistor)
 Compatible with all A8C extension blocks
 Built-in 2 communication ports
 6 channels high speed counter
 2 channels 100k Hz pulse output
 Non-power programming
 Inductive load protection diode

Expansion Modules

HCA8C Left Extension Blocks			
Name	Description	Name	Description
HCA8C-4AD-ADP	Aalog input block	HCA8C-4DA-ADP	Aalog output block
HCA8C-3A-ADP	Analog input/ output block	HCA8C-4PT-ADP	Pt100 temperature sensor input block
HCA8C-4PNK-ADP	Pt1000 temperature sensor input block	HCA8C-C24-ADP	Insulation serial communication block
HCA8C-POWER	Power supply input block		
HCA8C Right Extension Blocks			
HCA8C-4AD	Aalog input block	HCA8C-4DA	Aalog output block
HCA8C-8AD	Aalog input block	HCA8C-4AD4DA/ HCA8C-4AD2DA	Aalog output input block
HCA8C-4TC	Thermocouple input block	HCA8C-4PT	Platinum resistance input block
HCA8C-2HC	High speed counter block	HCA8C-2LC	Weighing and tension input block
HCA8C-4WK	Temperature control block	HCA8C-1PG & HCA8C-2PG	Pulse positioning block
HCA8C-4GP	Pulse positioning block	HCA8C-4GM	4 axes motion control block
HCA8C Right I/O Extension Blocks			
HCA8C-4EX4EYR	HCA8C-8EYR	HCA8C-8EX8EYT	HCA8C-16EYR
HCA8C-4EX4EYT	HCA8C-8EYT	HCA8C-8EX8EYT-C	HCA8C-16EYT
HCA8C-8EX	HCA8C-8EX8EYR	HCA8C-16EX	HCA8C-16EX-C
HCA8C-16EYT-C			
TX1N Expansion board			
TX1N-485BD-4	TX1N-422BD	TX1N-485BD-2	TX1N-232BD
TX1N-1DA-BD	TX1N-2AD-BD	TX1N-4EX2EYT-BD	TX1N-4DA-M-BD
TX2N Right Extension Blocks			
Name	Description	Name	Description
TX2N-2AD	Aalog input block	TX2N-2DA	Analog output block
TX2N-4AD	Analog input block	TX2N-4DA	Analog Output Block
TX0N-3A	Analog Input / Output Extension Block	TX2N-1PG	Pulse output block
HCA8 Right Extension Blocks			
Name	Description	Name	Description
HCA8-4AD	Analog input block	HCA8-4DA	Analog output block
HCA8-4PT	Platinum resistance input block	HCA8-4TC	Thermocouple sensor input block

CNC Controller

180XP Series CNC controller for turning and milling machine tools



1. Maximum interpolation axes: 3
2. Compatible with various AC servo drives
3. Configured with DI (32) and DO (24) interfaces, hand-held unit interface, simulation spindle control and encoder interfaces
4. Adopting 7 -inch monochrome or color LCD (resolution: 320 x 240)
5. Adopting international standard G-code programming mode and compatible with popular CAD or CAM automatic programming systems,
6. Provide function for constant small line segment machining, which is suitable for part processing of complicated modules
7. With the function for breakpoint save and machining recovery
8. With the functions for backlash compensation and single or bi-directional pitch error compensation to improve the machining precision
9. USB interfaces to achieve easy and fast data access

HNC-8 Series High Performance CNC System



Medium and high end CNC machines, which include turning machines, turning centers, milling machines, machining centers, tapping centers, engraving milling machines, turning-milling compound machines, five-axis machines, and multi-axis multi-channel machines

Plane grinding, cylindrical grinding, crankshaft grinding, bending machines, high-speed punch, plate shears, laser machines, stone processing machines, glass processing machines, woodworking machines, etc.

Human Machine Interface

TP 2000 Series touch screen

1. With multi-action switch, one key can control various actions
2. Various alarms function: alarm display, alarm record, floating alarm
3. System monitoring, recipe function, Clock function
4. 2 units connected
5. Various languages available
6. Easily updating to new functions with communication software
7. High cost-performance ratio
8. Various size for selection
9. Pre-set OS
10. USB function,
11. Ethernet option
12. Support various PLC brands



TP 2504
4.3 Inch



TP 2507- (E)
7 Inch, with Ethernet Option



TP 2510- (E)
10.1 Inch, with Ethernet Option

Text Panel



TP930-24V
4.3 Inch

1. Adopting ARM CORTEX-M3 32-bit RISC processor, high-speed and smooth
2. Double communication ports, supporting simultaneous connection of different PLC or controller, fast communication
3. Wrapped with high-speed USB interface to download the configuration to facilitate debugging, upgrading and quantity production
4. Metal dome film button, several millions of touch operation
5. Supporting off-line simulation, Facilitating debugging
6. Supporting vector fonts and multiple language
7. Supporting 8-level user password levels
8. Providing factory batch downloading tools, no need to open configuration documents, preventing mistaken modification

Servo Motor / Drive

HSD3 Series High Performance Servo System



1. AC 220V 3 phase or Single phase PMSM servo drive
2. Power range: 200W~5.5kW
3. Communication: EtherCAT CAN-Open Mechatrolink-II Mechatrolink-III Modus
4. With Absolute or incremental 23-bit magnetic encoder
5. Brake & seal & key option
6. Low & middle & high inertia servo motor option
7. Advanced vibration suppression control
8. Professional software for commissioning
9. Auto-tune function
10. Tool Magazine function

HSD2 Series General Purpose Servo Drive



1. AC 220V 3 phase or Single phase PMSM servo drive
2. Power range: 200W~5.5kW
3. Control mode: speed / torque / position control
4. Velocity loop bandwidth up to 300Hz for high response and dynamic applications
5. Could be controlled by three kind of pulse / analog / IO / Jog
6. Best cost performance in the market

HSV-180AD Series AC400V Servo Drive



1. AC 400V PMSM High Performance digital servo drive,
2. Power range: 3.0kW~45kW
3. Easy and flexible control (five control modes)
4. Full state display
5. Various interface and control modes
6. Applicable to situations that requires high speed and high power
7. Double encoder interfaces that can be connected to position feedback components such as grating ruler to form full-closed loop position control system

Servo Motor / Drive

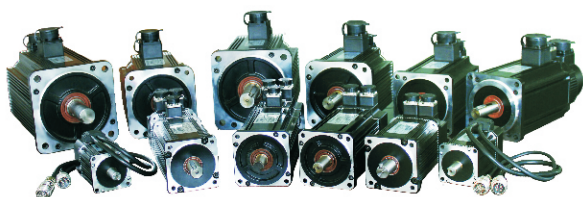
HSV-180AS Series AC400V Spindle Servo Drive



1. AC 400V Spindle High Performance digital servo drive,
2. Power range: 3.0kW~45kW
3. Easy and flexible control (five control modes)
4. Complete functions for CNC spindle control
5. Various interface and control modes
6. Applicable to situations that requires high speed and high power
7. Double encoder interfaces that can be connected to position feedback components such as grating ruler to form full-closed loop position control system



HSM Series AC 220V / 380V Servo Motor



1. Torque range: 0.3Nm to 2500Nm,
2. Rated speed: 1500 / 1700 / 2000 / 2500 / 3000rpm
3. Ultra energy saving
4. High response and accuracy
5. Low noise & low temperature rise
6. High reliability, less maintaining work caused
7. Feedback option: 2500PPR encoder, single/multi stage resolver, 17-bit encoder
8. Cooling method: natural, fan, water/oil
9. Flexible customizing is available.
10. With customization option for rated speed and rated torque

GM7 Series Spindle Servo Motor



1. Power range: 1.5kW to 132Nm,
2. Rated speed: 750 / 1500 / 3000rpm
3. Compact structure, small size, light weight, and high power density
4. Special design, small electromagnetic vibration, low noise, high rotation precision, constant torque and wide constant power speed range
5. Uniform air gap, high-precision balance, small torque ripple
6. Fully sealed design, high protection class (Ip54)
7. Special Class F insulation, anti-surge current and anti-corona, long life, and reliable operation
8. High price and performance ratio

Variable-frequency Drive

HV 390 Series Mini Size Vector Frequency Inverter



1. AC single phase 220V, 0.4~2.2kW
2. AC three phase 380V, 0.75~5.5kW
3. High-performance current vector control, V/f control
4. Mini size housing to fit small installation space
5. Rich peripheral interfaces
6. Various application functions, e.g. PID, textile swing,
7. Completed protection functions
8. Provides RS485 serial communication interface, standard Modbus
9. Products meet the EMC (EN61000-6-4, EN61800-3) standards

HV450 series general purpose SVC frequency inverter



1. AC 3 phase 220V/380V/460V, AC Single phase 220V
2. Power rating range:
3 phase 0.75 - 630kW, Single phase 0.4 - 2.2 kW
3. High-performance current vector control, V/f control, torque control
4. Rich peripheral interfaces
3. Extendable control keyboard
4. G/P unification
5. 7 Programmable DI terminals
6. Built-in input DC reactor (18.5kW and above model)
7. 16 segments multi-speed control, PID control, wobble control
8. Provides RS485 serial communication interface, standard Modbus
9. Products meet the EMC (EN61000-6-4, EN61800-3) standards

HV 590 series high performance closed-loop vector frequency inverter



1. Advanced motor control technology support both Open loop vector control(SVC), Closed loop vector control(FVC) and V/F control.
2. Different input voltage(220V single phase/220V 3 phase/380V 3 phase/460V 3 phase).
3. High starting torque characteristics and precise speed control.
4. Rich and flexible I/O accesses and field bus options.
5. Suitable for all regions which have different grid and voltage.
6. Upgrade I/O(NPN/PNP compatible) can meet more application requirement without controller(PLC) like elevator, textile etc.
7. Programmable DI/DO/AI/AO as well as RS485 Modbus RTU make easy communication with other devices.

Variable frequency Drive

HV580 Series High Performance Vector Frequency Inverter



1. AC 380V / 460V 3 phase Frequency Inverter
2. Power range: 0.75 ~ 110kW
3. Support for multi-motor vector control (three-phase AC synchronous motor, three-phase AC induction motor)
4. Supports a variety of encoder
5. To protect the mechanical torque limitation
6. High starting torque feature.
7. Superior responsiveness
8. Motor overheating protection
9. Prompt current limit function
10. Multi-motor switch
11. Inverter non-stop while Instantaneous electricity failure
12. Virtual IO functionality
13. Flexibility use of analog input and output
14. Resistance to environmental design
15. Rich functions
16. Frequency source is more abundant
17. Much richer information display
18. More powerful protection
19. More streamlined parameter

HHS Series Soft Starter

1. Stable quality with attractive price
2. AC Three-phase 220V/380V/480V, 50/60Hz
3. Advanced soft starter type: "voltage control type" and "current limiting type"
2. Capacity to Motor effectively, so it could save the cost.
3. Intelligent, digital and single chip control.
4. Man-machine conversation function.
5. Delay starting function. Operation current displayed.
6. Failure self-diagnosis.
7. Natural wind cooling. Space saving.
8. Can reduce the starting stress of motor and other loading equipments, so that lengthen their service life.
9. The function of soft stopping can solve effectively the surging problem of inertia system when stopping.
10. The perfect and reliable protection features, can give the effective protection to the operator's safety as well as the motor and matched equipments.



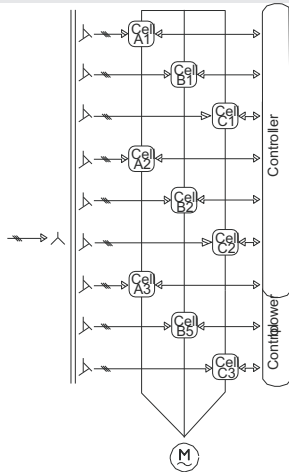
Medium Voltage AC Drive

HMV1000 series Medium Voltage AC Drive

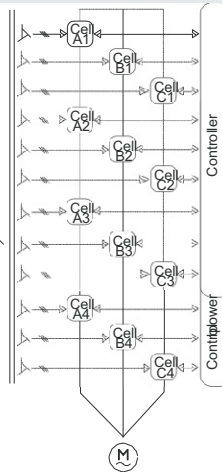


1. Power supply: 3 phase, AC, 3kV / 3.3kV / 4.16kV / 6kV / 6.6kV / 10kV / 11kV / 13.8kV
2. Power range: 315 ~ 8000kW
3. Compact design
4. Fully equipped
5. Restricted access to medium voltage area
6. Standard HD HMI monitoring maximizes user convenience
7. Improved power quality, perfect Energy saving
8. High Reliability and Easy Maintenance
9. Torque limiting function
10. Spinning start (Flying start)
11. Automatic power cell bypass option
12. Low voltage ride-through (LVRT)
13. Synchronous transfer
14. High performance Sensorless vector control
15. Master-Slave control
16. Automatic parameter identification (Auto-tune)
17. Much richer information display
18. More powerful protection
19. More streamlined parameter

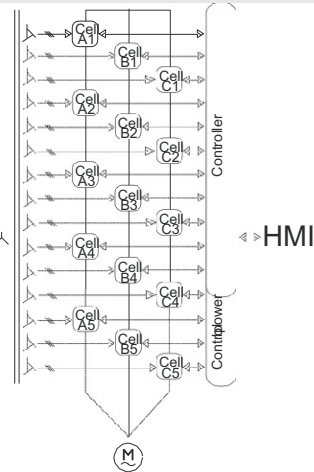
3kV class



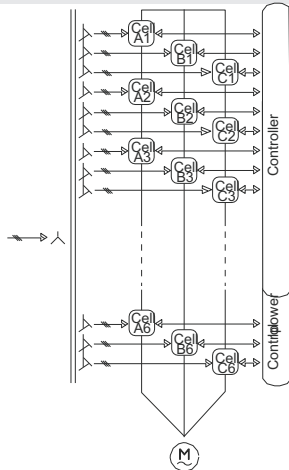
3.3kV & 4.16kV class



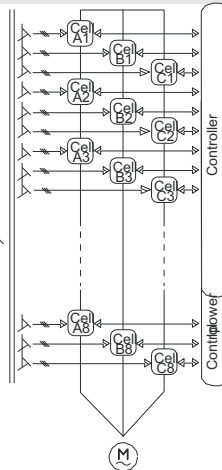
6kV class



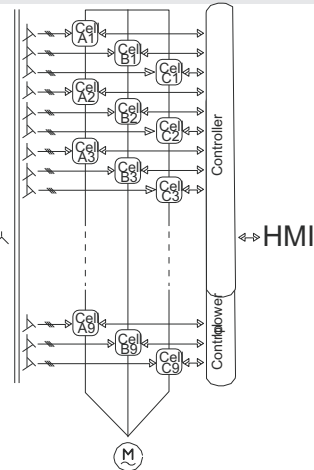
6.6kV class



10kV class

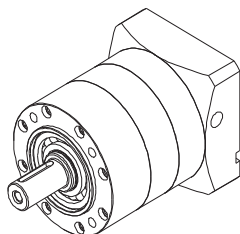


11kV class



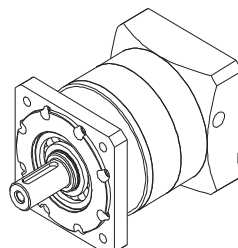
Planetary Gearbox

PLE series reducer (PLE060 PLE090 PLE120 PLE160)



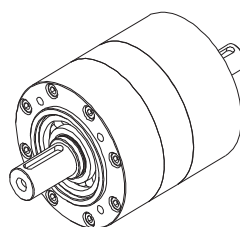
4 optional size	60mm, 90mm, 120mm, 160mm	
Rated output torque	8.5Nm~680.0Nm	
Ratio	1-stage	3, 4, 5, 7, 10
	2-stage	12, 16, 20, 25, 28, 35, 40, 50, 70, 100
	3-stage	80, 100, 125, 140, 175, 200, 250, 350, 400, 500, 700, 1000
backlash	1-stage	Precision: <3 arc-min Standard: <8 arc-min
	2-stage	Precision: <5 arc-min Standard: <10 arc-min
	3-stage	Precision: <8 arc-min Standard: <12 arc-min

PLF series reducer (PLF060 PLF090 PLF120 PLF160)



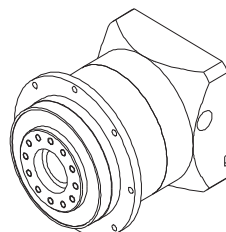
4 optional size	60mm, 90mm, 120mm, 160mm	
Rated output torque	8.5Nm~680.0Nm	
Ratio	1-stage	3, 4, 5, 7, 10
	2-stage	12, 16, 20, 25, 28, 35, 40, 50, 70, 100
	3-stage	80, 100, 125, 140, 175, 200, 250, 350, 400, 500, 700, 1000
backlash	1-stage	Precision: <3 arc-min Standard: <8 arc-min
	2-stage	Precision: <5 arc-min Standard: <10 arc-min
	3-stage	Precision: <8 arc-min Standard: <12 arc-min

PLS series reducer (PLS060 PLS090 PLS120 PLS160)



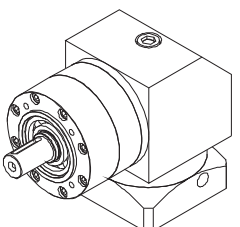
4 optional size	60mm, 90mm, 120mm, 160mm	
Rated output torque	8.5Nm~680.0Nm	
Ratio	1-stage	3, 4, 5, 7, 10
	2-stage	12, 16, 20, 25, 28, 35, 40, 50, 70, 100
	3-stage	80, 100, 125, 140, 175, 200, 250, 350, 400, 500, 700, 1000
backlash	1-stage	Precision: <3 arc-min Standard: <8 arc-min
	2-stage	Precision: <5 arc-min Standard: <10 arc-min
	3-stage	Precision: <8 arc-min Standard: <12 arc-min

PLH series reducer (PLH064 PLH090 PLH120 PLH160)



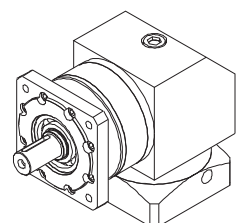
4 optional size	64mm, 90mm, 120mm, 160mm	
Rated output torque	8.5Nm~680.0Nm	
Ratio	1-stage	3, 4, 5, 7, 10
	2-stage	12, 16, 20, 25, 28, 35, 40, 50, 70, 100
	3-stage	80, 100, 125, 140, 175, 200, 250, 350, 400, 500, 700, 1000
backlash	1-stage	Precision: <3 arc-min Standard: <8 arc-min
	2-stage	Precision: <5 arc-min Standard: <10 arc-min
	3-stage	Precision: <8 arc-min Standard: <12 arc-min

ZPLE series reducer (ZPLE060 ZPLE090 ZPLE120 ZPLE160)



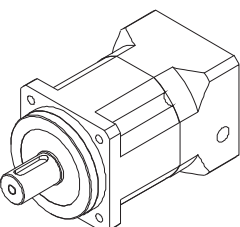
4 optional size	60mm, 90mm, 120mm, 160mm	
Rated output torque	8.5Nm~680.0Nm	
Ratio	1-stage	3, 4, 5, 7, 10
	2-stage	12, 16, 20, 25, 28, 35, 40, 50, 70, 100
	3-stage	80, 100, 125, 140, 175, 200, 250, 350, 400, 500, 700, 1000
backlash	1-stage	Precision: <3 arc-min Standard: <8 arc-min
	2-stage	Precision: <5 arc-min Standard: <10 arc-min
	3-stage	Precision: <8 arc-min Standard: <12 arc-min

ZPLF series reducer (ZPLF060 ZPLF090 ZPLF120 ZPLF160)



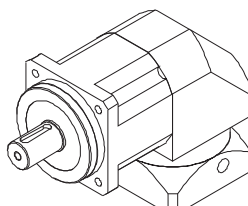
4 optional size	60mm, 90mm, 120mm, 160mm	
Rated output torque	8.5Nm~680.0Nm	
Ratio	1-stage	3, 4, 5, 7, 10
	2-stage	12, 16, 20, 25, 28, 35, 40, 50, 70, 100
	3-stage	80, 100, 125, 140, 175, 200, 250, 350, 400, 500, 700, 1000
backlash	1-stage	Precision: <3 arc-min Standard: <8 arc-min
	2-stage	Precision: <5 arc-min Standard: <10 arc-min
	3-stage	Precision: <8 arc-min Standard: <12 arc-min

PLX series reducer (AB060 AB090 AB115 AB142 AB180 AB220 AB280 AB330 AB400)



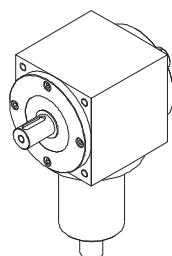
9 optional size	80mm, 90mm, 115mm, 142mm, 180mm, 220mm, 280mm, 330mm, 400mm	
Rated output torque	18.5Nm~9800.0Nm	
Ratio	1-stage	3, 4, 5, 7, 10
	2-stage	9, 15, 20, 25, 30, 35, 40, 50, 70, 1000
	3-stage	64, 80, 100, 150, 200, 250, 350, 400, 500, 700, 1000
backlash	1-stage	Precision: <4 arc-min Standard: <8 arc-min
	2-stage	Precision: <6 arc-min Standard: <10 arc-min
	3-stage	Precision: <7 arc-min Standard: <18 arc-min

ZPLX series reducer (ABR060 ABR090 ABR115 ABR142 ABR180 ABR220 ABR280)



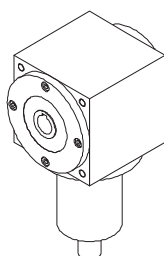
7 optional size	60mm, 90mm, 115mm, 142mm, 180mm, 220mm, 280mm	
Rated output torque	18.5Nm~5120.0Nm	
Ratio	1-stage	3, 4, 5, 7, 10
	2-stage	9, 15, 20, 25, 30, 35, 40, 50, 70, 1000
	3-stage	64, 80, 100, 150, 200, 250, 350, 400, 500, 700, 1000
backlash	1-stage	Precision: <5 arc-min Standard: <8 arc-min
	2-stage	Precision: <7 arc-min Standard: <10 arc-min
	3-stage	Precision: <9 arc-min Standard: <18 arc-min

VS series reducer (VS09 VS11 VS14 VS17 VS21 VS24 VS28)



7 optional size	90mm, 110mm, 140mm, 170mm, 210mm, 240mm, 280mm	
The allowable input power	1.1KW~18KW	
Ratio	1, 1.5, 2, 3, 4, 5	

VA series reducer (VA09 VA11 VA14 VA17 VA21 VA24 VA28)



7 optional size	90mm, 110mm, 140mm, 170mm, 210mm, 240mm, 280mm	
The allowable input power	1.1KW~18KW	
Ratio	1, 1.5, 2, 3, 4, 5	

Application

Packaging & Printing



CNC Machine Tool



Textile



Fan & Pump



Converting



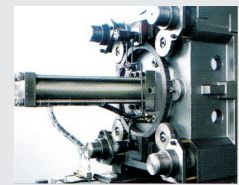
Elevator



Crane

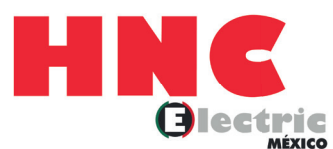
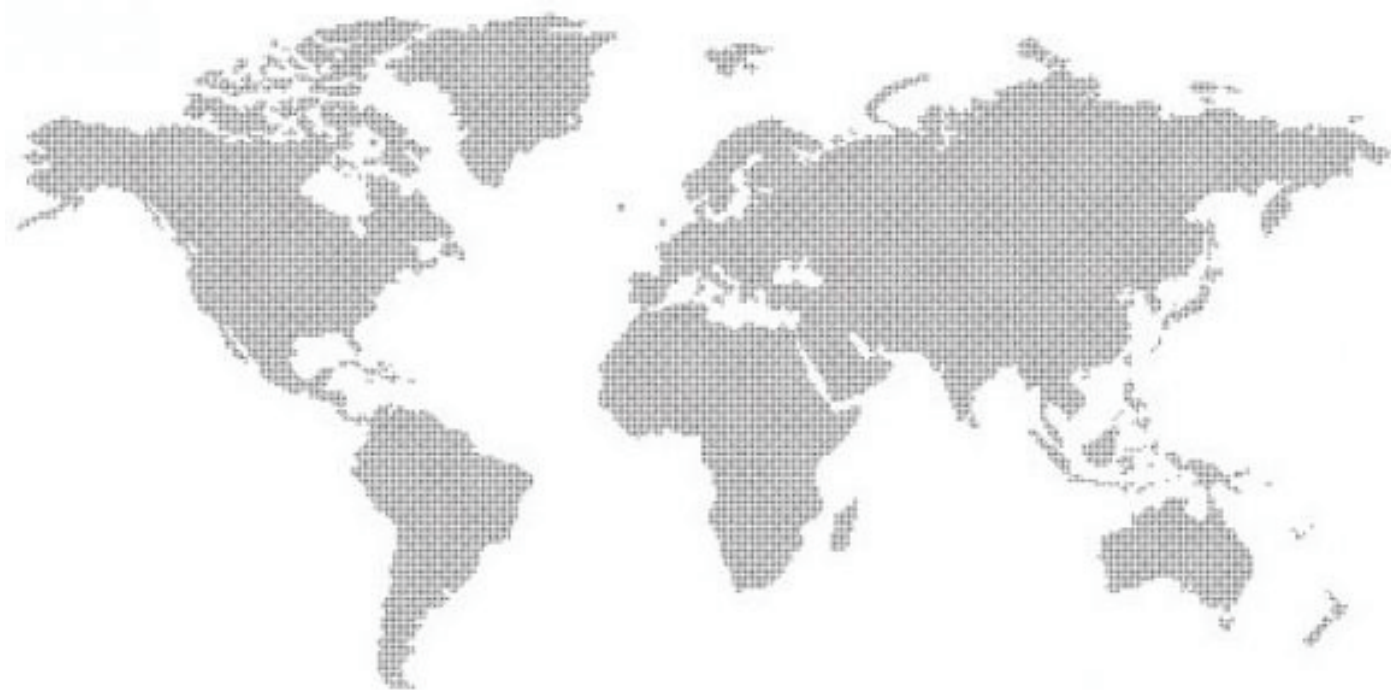


Plastic Industry



Certification





www.hncelectricmexico.com
Armando Birlain Schaffler #2001
Torre Corporativo 2 Int. Mezanine
Col. Centro Sur, Querétaro, Qro. 76090