

Intelligent Brushless Drive IMDL series

3 in 1
Motion controller
PLC
Drive



Advanced Motion functions

Positioning



Gearbox



CAM profiles



Registration



CAM boxes



PLC



Applications

Multi-axis manipulators
Packaging machines
Label printing
Winding
Flying shears
Dosing

Security

Setup & program on
Memory Stick

Performances

Setup tools

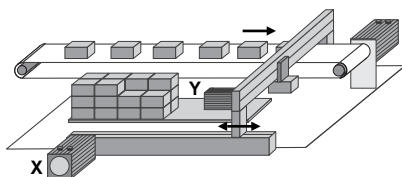
Trajectory generator
Instrument panel
Hyper terminal
Oscilloscope

Software workshop

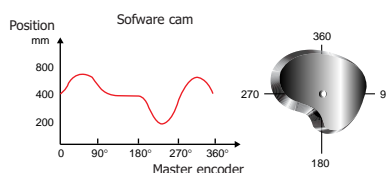
Basic Motion Tasks
Trajectory array
CAM profiles



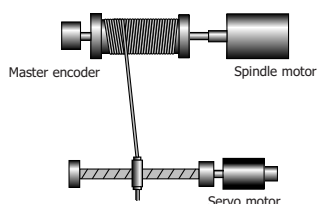
Palletisation



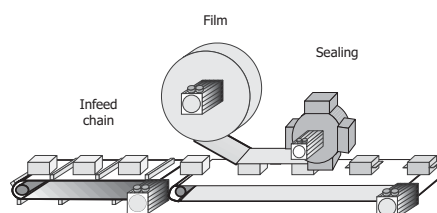
Electronic cams



Winding



Flow-Pack



Power supply

230V AC $\pm 10\%$ single-phase for IMDL230 models
400V AC $\pm 10\%$ three-phase for IMDL400 models

Auxiliary supply

24 V DC $\pm 10\%$, 0.4A typical (0.7A max if all options)

EMC Filter

Integrated

Brake resistor

Integrated (30W)
Provision for an external resistor

Architecture

32 bit Processor :150 MHz DSP and 100 000 gate FPGA
memory: FLASH, FRAM, RAM and Memory Stick*
Real-time multi-tasking kernel

Control loops

Current loop : 75 μ s - Speed loop : 150 μ s - Position loop : 150 μ s

Motor feedback

Resolver or SinCos encoder HIPERFACE*

Master encoder

Incremental, Absolute SSI, Virtual
SinCos HIPERFACE* (only if Motor feedback does not use it)

Encoder emulation

Setup from 1 to 100 000 pulses per revolution

Communication

MODBUS RTU, CANopen*, ETHERNET*

Inputs / Outputs

4 digital inputs (with 2 fast 1 μ s) / 2 digital outputs
2 analogue inputs / 1 analogue output
Additional module 12 digital inputs / 8 digital outputs 500mA*

Diagnostic

Status display

Operating modes

Torque, speed or position mode
Stepper Mode (pulse input, direction)
Motion functions (positioning, S profile, gearbox, CAM profiles, synchronization, CAMBOX functions, triggered movement)

| IMDL range | IMDL 230 / 2 | IMDL 230 / 5 | IMDL 400 / 1 | IMDL 400 / 4 |
|----------------------|-----------------|-----------------|----------------|----------------|
| Power supply | 230 V AC single | 230 V AC single | 400 V AC three | 400 V AC three |
| Nominal current | 2.5 Arms | 5 Arms | 1.25 Arms | 4 Arms |
| Peak current (2s) | 5 Arms | 10 Arms | 2.5 Arms | 8 Arms |
| Nominal power | 0.7 kVA | 1.5 kVA | 0.7 kVA | 2.2 kVA |
| Dimensions W x H x D | 64 x 293 x 201 | 64 x 293 x 201 | 64 x 293 x 201 | 64 x 293 x 201 |

* options