

Full Digital drives



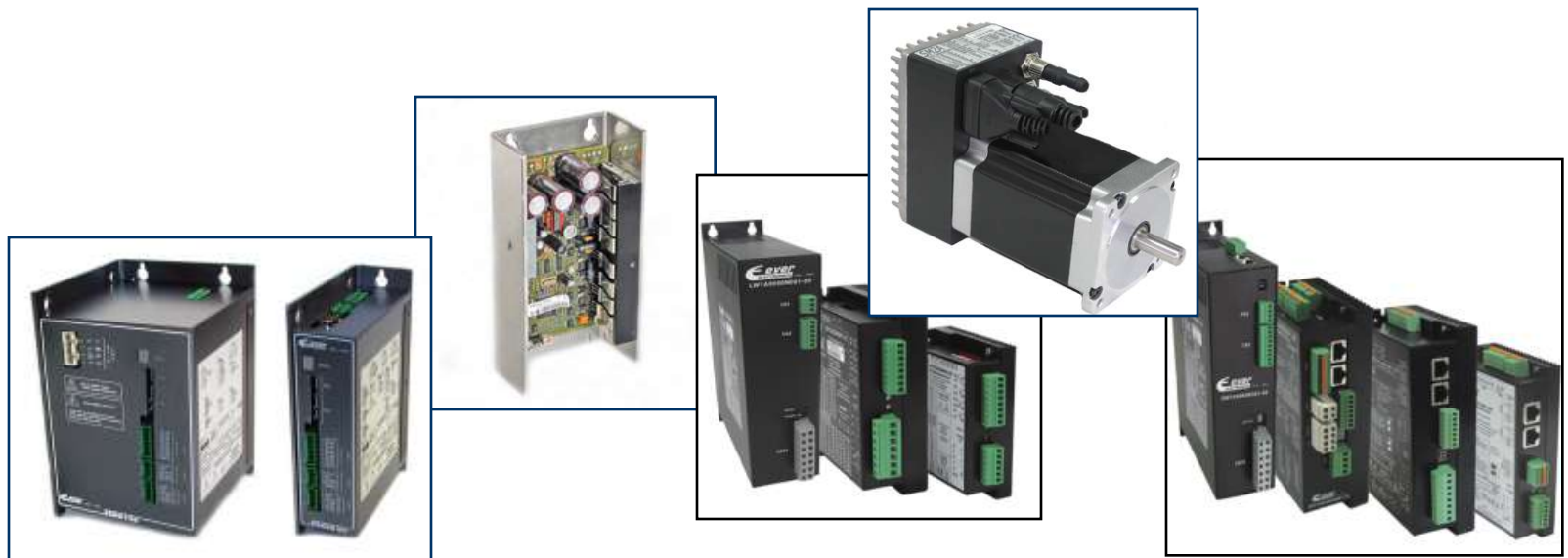
Ever
ELETTRONICA

*The clever drive
since 1977*



Ever Elettronica drives

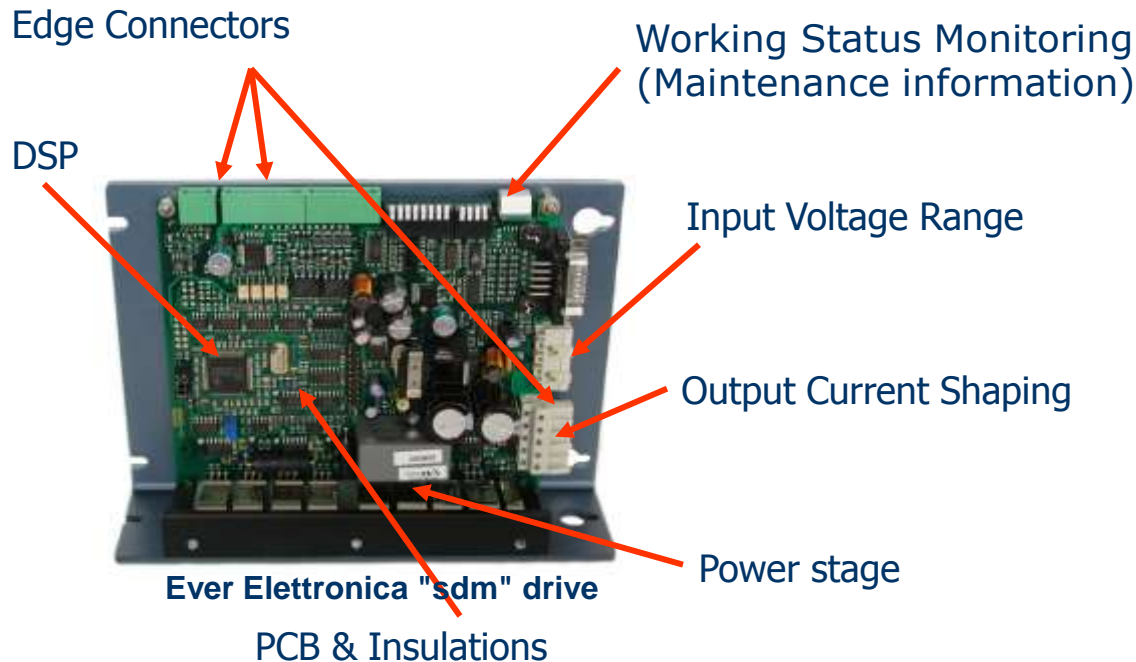
- Wall & rack mounting frames or integrated motor & drive systems
- *CK & Dir* or *Programmable* and *built in firmware* devices (**SDL/SDM/LW1/SW1/SM2A** series)
- AC (with or without line transformer) or DC power supply
- Wide power range (up to 8.0 A output current at 350 Vdc)
- From full step to 128 microsteps per step
- Fieldbus links: CANBus or modbus RS232/RS485
- Open and Closed Loop (**SDL/SDM/SM2A** series)





Drives quality

- Drives Benchmark Index:



- The best technical solutions implemented inside the drives



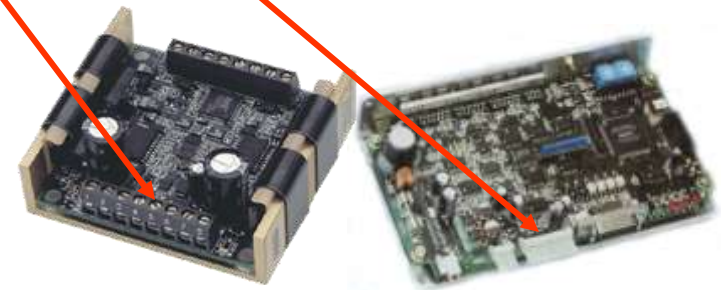
Competitors comparison

Edge Connectors



Ever Elettronica

- EVER ELETTRONICA drives have:
 - plug-in, separated by function and high ratings connectors for safe and easy installation and maintenance
 - adapted to the use
 - meeting standards requirements
 - secure and reliable



Competitors



Competitors comparison

DSPC

(Digital Signal Processor Controller)



Ever Elettronica

• EVER drives are *Full Digital* :

- DSPC controlled for enhanced and flexible functioning
- DSPC technology benefits of continuous improvements
- integrating f⁴d² firmware

FPGA

ASIC

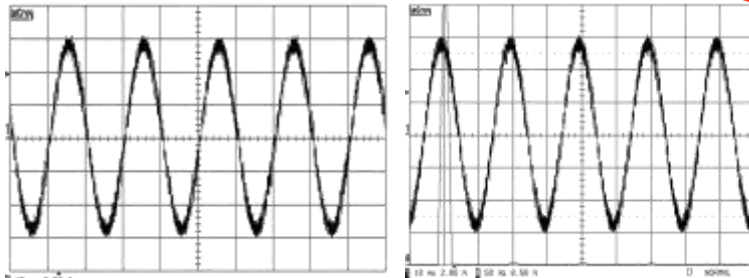


Competitors



Competitors comparison

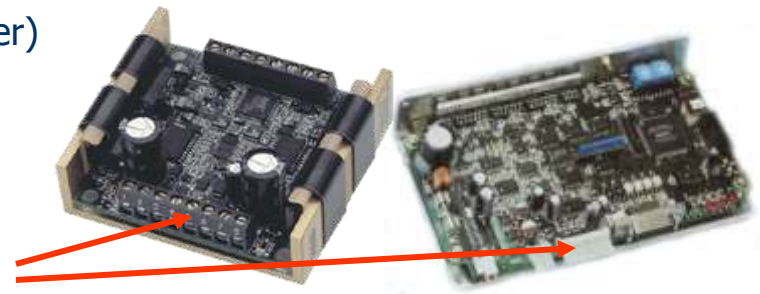
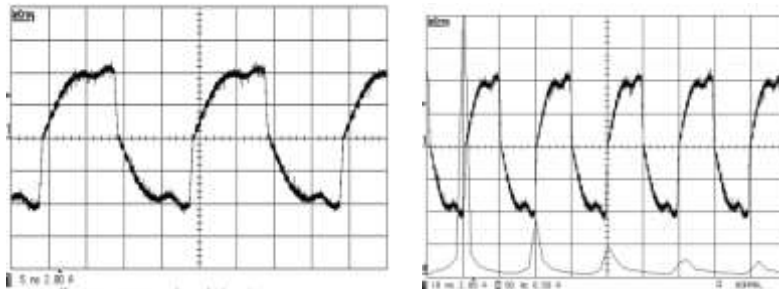
Output Current Shaping



Ever Elettronica

- Ever Elettronica drives feature an advanced current regulation firmware to obtain:

- smooth and low noise motor rotation without any resonance
- lower motor heating
- maximum torque at any speed (max shaft power)



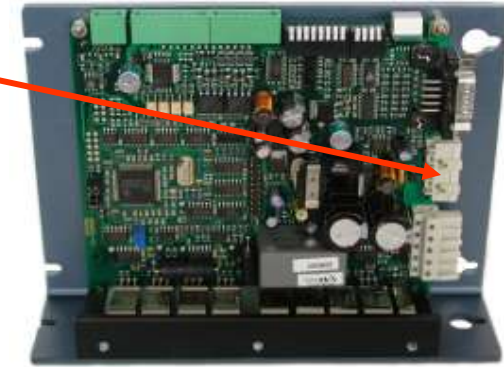
Competitors



Competitors comparison

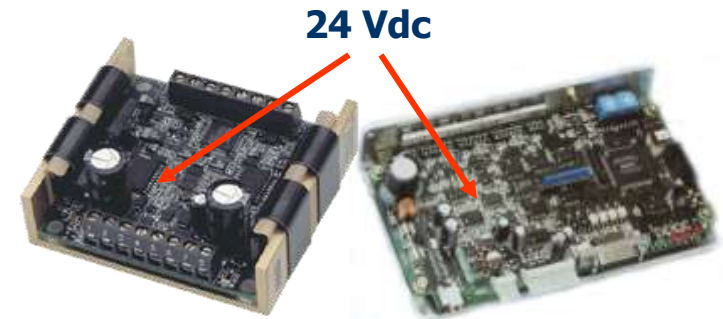
AC/DC bus Voltage Ratings

- 24÷48 Vac
- 24÷80 Vac
- 36÷100 Vac
- 115÷230 Vac
- 24÷40 Vdc
- 24÷70 Vdc
- 24÷130 Vdc



Ever Elettronica

- With EVER drives users don't need:
 - any regulated power supply
 - any external dc bus capacitor



Competitors



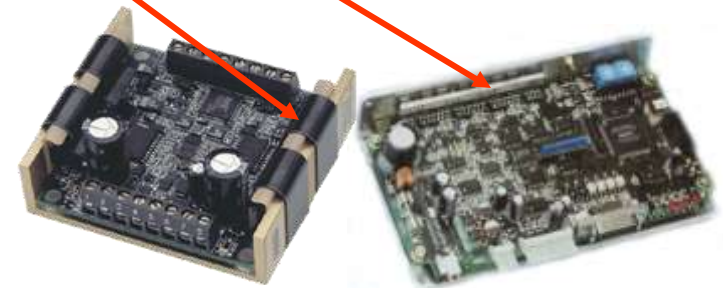
Competitors comparison

Power Stages

- EVER drives are provided with:
 - springs fitted high power transistors bridge for safe operation in any environment and load conditions.
 - benefits:
 - higher reliability and mtbf
 - constant performances even in harsh and demanding environments



Ever Elettronica



Competitors



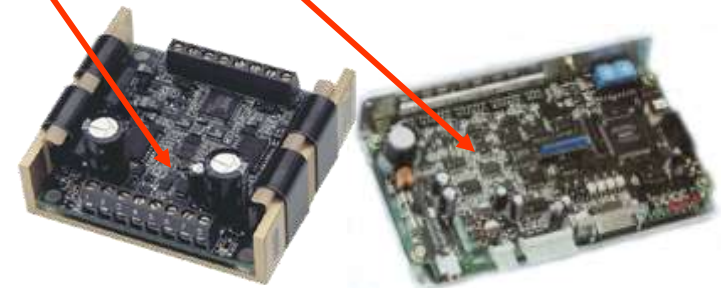
Competitors comparison

PCB & Insulations

- EVER drives feature:
 - optimized PCB dimensions, manufacturing and insulating materials for safe operations in hard EMI environments



Ever Elettronica



Competitors



Competitors comparison

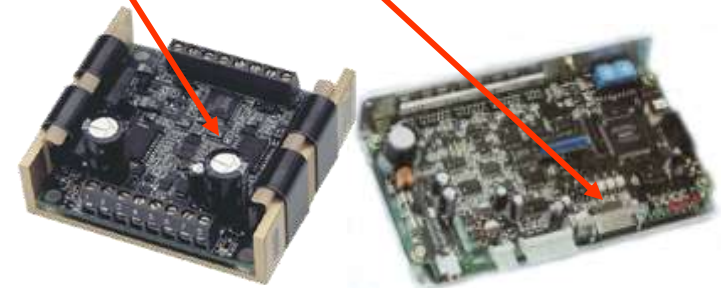
Working Status Monitoring
(Storing)



Ever Elettronica

• EVER drives have:

- seven segments led status monitor to check the working status and to simplify the maintenance and diagnostics
- relevant working information is stored in a non volatile memory for easy service and fast troubleshooting



Competitors



Competitors comparison

- The table below summarizes the main differences between Ever Elettronica's LW1D3050N081 and a competitor's similar drive:

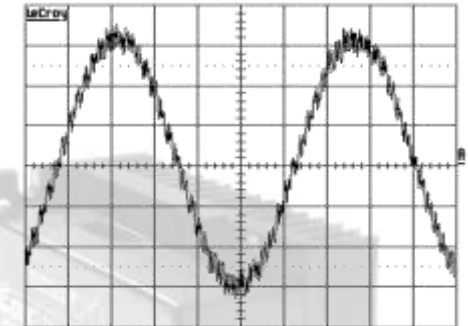
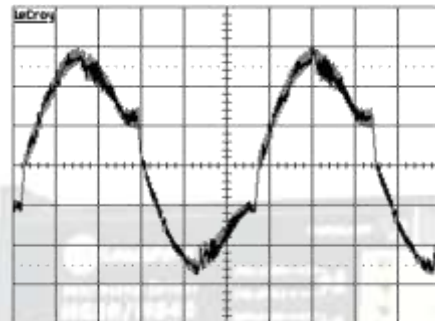
Characteristics	Competitor	Differences	LW1D3050N081 Ever Elettronica
Power	24 ÷ 80Vdc / ----- 2.8 ÷ 7,8 A peak	The competitor doesn't indicate the effective current value.	24 ÷ 80Vdc / 2.0 ÷ 5.5 A rms 2.8 ÷ 7.8 A peak
Protections	Current, under voltage and over voltage.	De competitor doesn't have heat protection	Current, under and over voltage and overheating protection
Inputs	#3 5Vdc NPN, PNP, line driver		#3 5Vdc NPN, PNP, line driver
Outputs	---	The competitor's drive doesn't have available outputs	#1 24Vdc/100mA optocoupled
Functioning	Clock_rise/clock_fall, Clock_direction/Clock_up- Clock-down		Clock_rise/clock_fall, Clock_direction/Clock_up-Clock- down, enable/disable, voltage mode si/no,M880/M840 current settings
Voltage mode	---	The competitor's drive has no the voltage mode	Adaptable through jumpers for a velocity beyond 600 rpm
Led diagnostics	Green/Red: PWR ok/FAULT ok	When the leds are mounted on the competitor's board, the leds aren't visible anymore.	Green: PWR ok Green: FAULT ok
Settings	#8 dip-switches – 2 jumpers		#8 dip-switches – 5 jumpers
Dimensions and weight	112x97x48 mm – 440 gr.		120x97x48 mm - 400 gr.
IP protection	IP20		IP20
Humidity	40% 90% without condensation		0%-90% without condensation



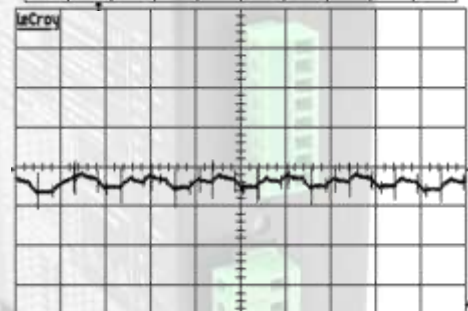
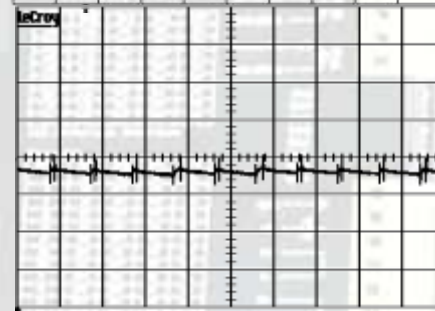
Competitors comparison

- Ever Elettronica's LW1D3050N081 vs a competitor's drive:

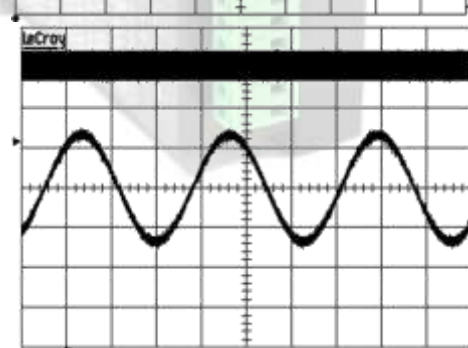
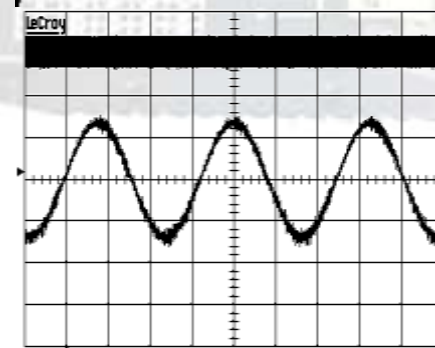
- Output current distortion



- DC current regulation precision



- AC current regulation precision

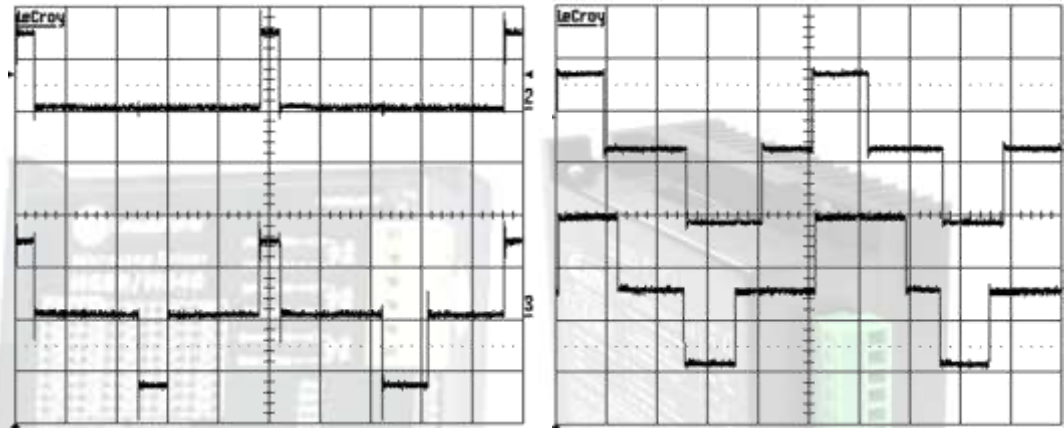




Competitors comparison

- Ever Elettronica's LW1D3050N081 vs a competitor drive:

- Current regulation frequency



- Drive live's critical parts (DC bus cap) working condition derating

