

# Drive Electronics

## Low Voltage

For combination with:  
Stepper motor: ADM 0620, AM 0820, AM 1020,  
AM 1524

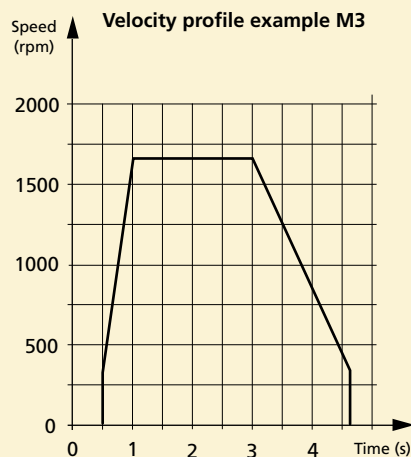
### Series AD VL M

	VL M1	VL M3	
Power supply voltage:			
- min.	3	3	V DC
- max.	14	14	V DC
Power supply current	14	16	mA
Output current, max. (for each phase)	400	400	mA
Logic input level:			
- low	0 ... 0,6	0 ... 0,6	V DC
- high	1,6 ... 14	1,6 ... 14	V DC
Direction of rotation	CW / CCW	CW / CCW	
Step mode	full step / half step	full step / half step	
Step frequency:			
- min.	-	10	full step/s
- max.	-	2 000	full step/s
Operating temperature range	0 ... +70	0 ... +70	°C
Weight	22	34	g

#### General description / Features / Command connector functions

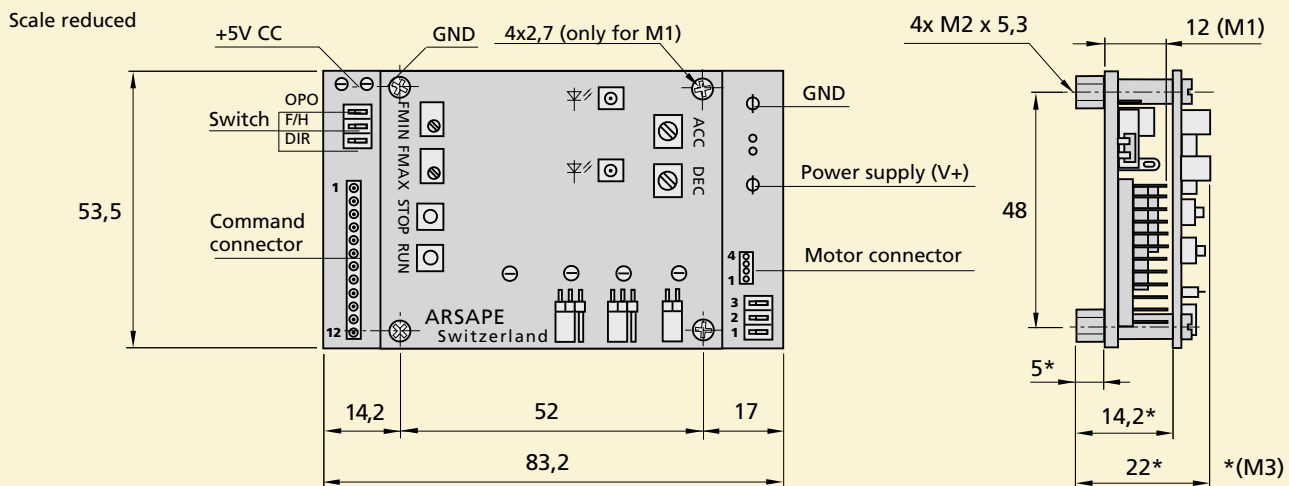
The drivers type AD VL M are designed to drive the two phase stepper motors type AM ... 2 types of drivers are available:

- **AD VL M1** basic drive composed of a translator (full step and half step mode) and a power stage in voltage mode.
- **AD VL M3** contains the basic drive AD VL M1 and a pulse generator for ramps. It provides a velocity profile to start and stop the stepper motor with acceleration and deceleration ramps.



Pin	I/O	Function: active on high logic level
1	I	OPO > full step mode, one phase ON (wave)
2	I	F/H > half step mode; default or low logic level = full step mode, 2 phases ON
3	I	DIR > ccw ; default or low logic level = cw
4	I	CLK > external clock input, active on the positive edge of the clock pulse
5	I	RUN > starts the clock generator *
6	I	STOP > stops the clock generator *
7	I	Inhibit > current in both phases is shut off
8	O	Busy > low level as long as the clock is active *
9	-	GND > ground potential: 0 Volt
10	O	VCC > +5V output
11	-	GND > ground potential: 0 Volt
12	I	VCO > external voltage input (Voltage Controlled Oscillator) *

\* only valid for the AD VL M3



Specifications subject to change without notice