

Very compact eurocard servodrives 65 - 145 - 200 Vdc power supply range for Brush servomotors. Driving motor ranges up to 9Nm, tacho generator, encoder or armature feedback.

Mini Dc

SERVO AMPLIFIER FOR BRUSH DC MOTORS

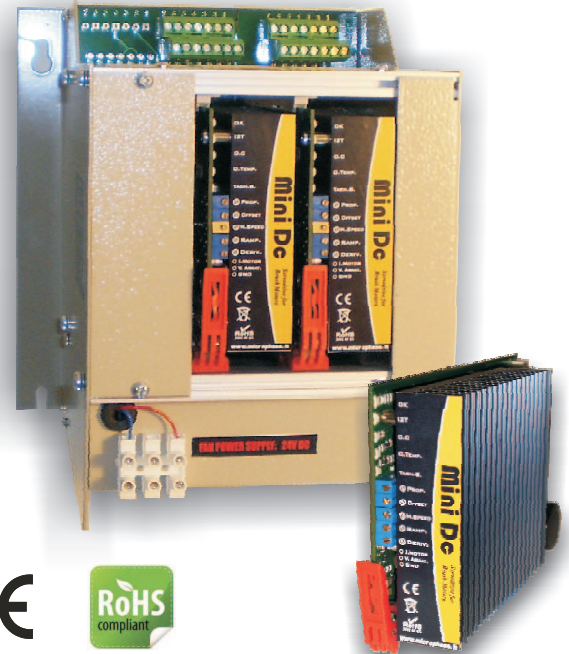
The **Mini DC** is a precision four quadrant regenerative servo drive for permanent dc Brush servomotors. Possible control methods include velocity and torque modes. There are many different velocity modes: tachogenerator, encoder and armature feedback. **Mini DC** requires only a single VDC power supply which could even be provided with unbeatable multi-axis systems, when combined with the rack system up to 7 axis, with internal power supply and dumping card.

► Mini DC advantage

- Eurocard servodrives up to 2,8W (9Nm) motors
- Small package, versatility, ease-of-use, cost-effective
- Feedback for motors with:
 - * Encoder
 - * Tachogenerator
 - * Armature

► Standard characteristic

- Four quadrant regenerative operation
- Single supply DC voltage
- 5 diagnostic Leds (State and Alarms)
- Protections for: Over/Under voltage, max. temperature reaches, Over current, Ixt motor current
- 1 Differential velocity input +/-10V
- 1 Torque mode (demand current) input
- Feedback available (series): Quadrature encoder - tachogenerator - Armature
- NPN Fault drive output
- Five Potentiometer adjustments (Speed, offset, gain, derivative)
- Acceleration/deceleration ramp



► Specifications

- | | |
|------------------------------|------------------------|
| • PWM frequency | 20KHz |
| • Operative temperature | 0/+45°C |
| • Analog inputs range | +/-10Vdc |
| • Current monitor | +/- 6Vdc (At pk curr.) |
| • Auxiliary power supply | +/-10Vdc @ 3mA |
| • Maximum encoder frequency | 200KHz |
| • Logic level encoder inputs | ≥ +2,8V/+24V |
| • Start signal (Input range) | +9V/+30Vdc |
| • Current loop bandwidth | 2KHz |
| • Velocity loop bandwidth | 150Hz |

MODEL	MINI DC 60				MINI DC 140				MINI DC 200			
DC Voltage Supply (VDC)	65				145				200			
DC Voltage Range (VDC)	20 - 76				70 - 160				100 - 230			
Size (A)	5	8	10	14	5	8	10	14	5	8	10	14
Rated Current (A)	5	8	10	14	5	8	10	14	5	8	10	14
Peak Current (1) (A)	10	16	20	28	10	16	20	28	10	16	20	28
Rated Power (2) (W)	325	520	650	910	725	1160	1450	2030	1000	1600	2000	2800
Peak Power (3) (W)	650	1040	1300	1820	1450	2320	2900	4060	2000	3200	4000	5600

Order code example:

MIDC - 140 - 14 - T - RD - ord. 612/13

Product name _____ Customer order _____
 Model _____
 Size (A) _____
 Feedback: _____
 Tacho generator= T
 Encoder= E
 Armature= A
 Control mode: _____
 RD= Differential vel.

Label example:

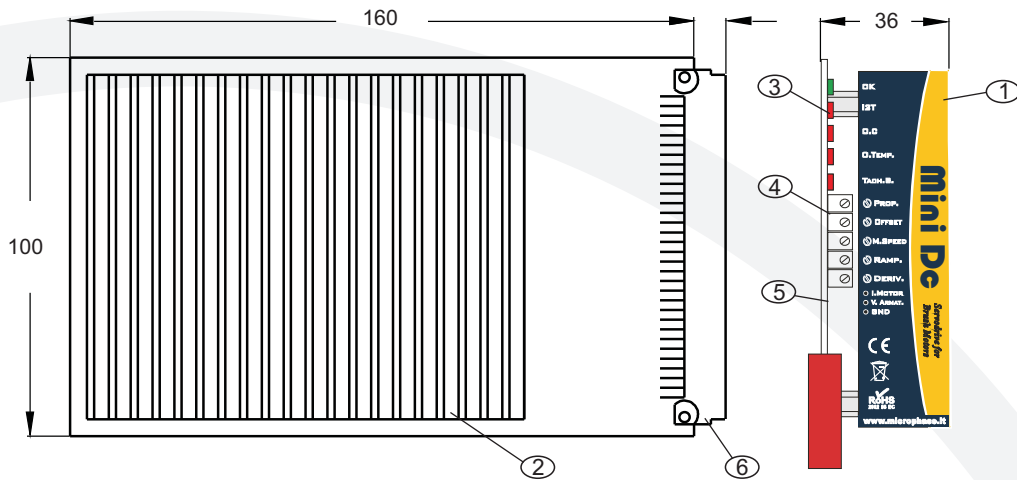
**MIDC-140-14-T-RD
ord. 612/13**

(1) Peak current (Adc) for 2 sec. (2) Power of amplifier at the rated current and rated voltage (3) Power of amplifier at the peak current and rated voltage

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► View product

Mechanical dimensions

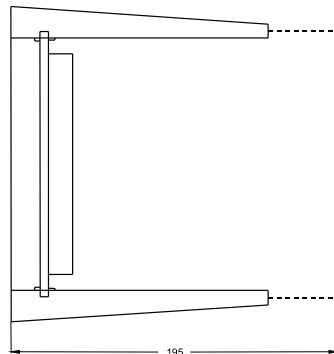
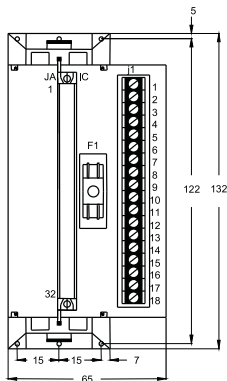


- (1) Product Label
- (2) Cooling radiator booster
- (3) Leds
- (4) Calibration Potentiometers
- (5) Test (Current monitor, and armature)
- (6) Connector type DIN 64 Pin

*Dimensions mm

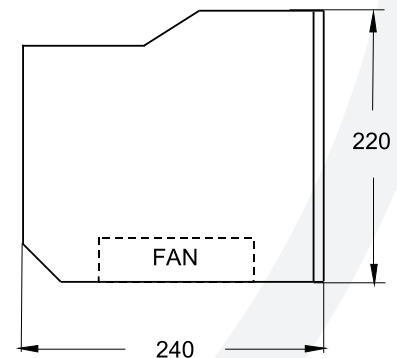
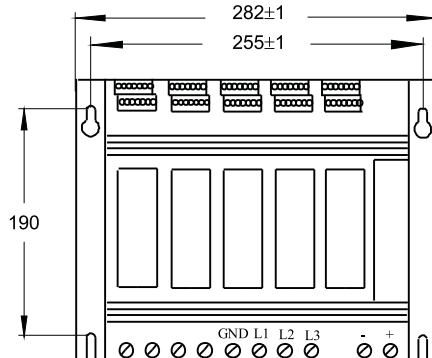
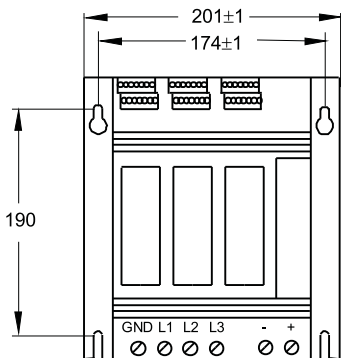
[Datasheet Mini DC (eng) - 2 of 2]

► Single card and rack systems



Single card with DC input power supply and supply line fuse.

Rack multiaxis from 1 to 7 slot with internal dumping resistor. Three input L1, L2, L3 with range from 44VAc to 145VAc power supply.



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Accessories: • Switching power supply 220-400Vac/55Vdc • Single/3ph transformers from 100 to 7000VA • Single/3ph bridges 600V 35A • Power supply capacitors 4700uF / 10000uF • Net filters (for CE compliance)