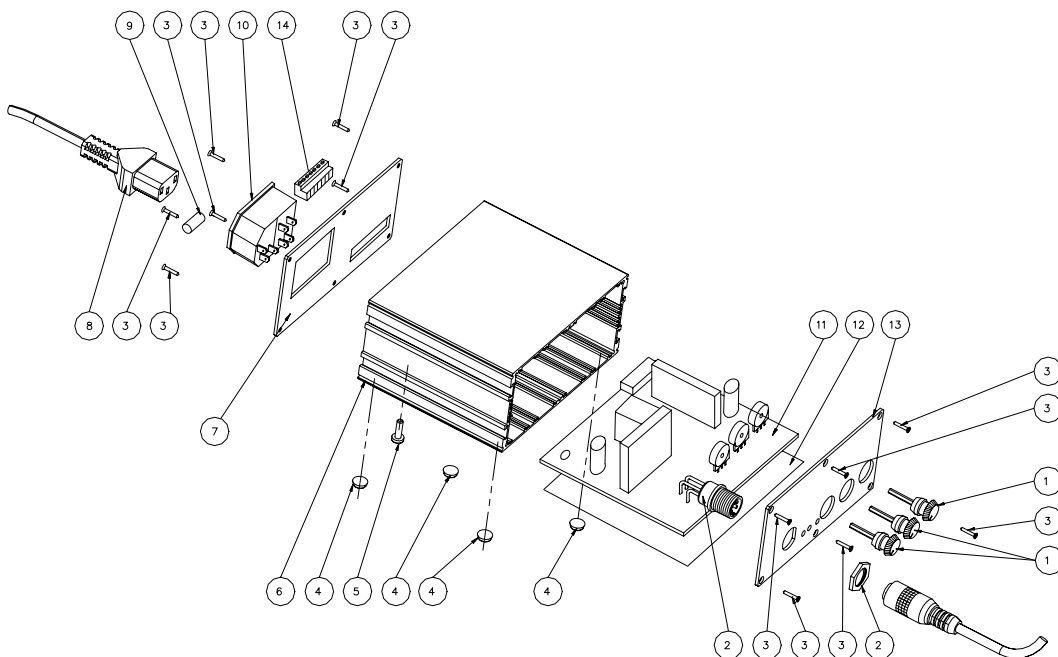


EDU 1BR/SG EXPLODED VIEW



EDU 1BR/SG PARTS LIST

RIF	DESCRIPTION	CODE	RIF	DESCRIPTION	CODE
1	Plastic KNOB (2pcs)	800640	8	Power supply cable	800020
2	Connector 8 PIN M12 M	201766/C	9	Fuse 3,15 A	800619
3	Self tapping screw 2,6 x 9,5 mm (12pcs)	800605	10	90/260VAC socket with on/off switch and fuseholder	800618
4	Plastic support (4pcs)	800016	11	PCB EDU 1BR/SG	856706/T
5	Screw M4 x 4 mm	806635	12	Isolating sheet	800654
6	Aluminium box	811010/L/VB	13	Front panel	821704
7	Back panel	831717/SG	14	Connector 7 PIN F	800109



Operator's Handbook

IDENTIFICATION DATA OF THE MANUFACTURER

KOLVER S.r.l.
VIA MARCO CORNER, 19/21 - 36016 THIENE (VI) - ITALY

IDENTIFICATION DATA OF THE PRODUCT

POWER SUPPLY AND CONTROL UNIT MODEL: **EDU 1BR/SG**
CODE: **001000/SG**

TECNICAL DATA OF THE PRODUCT

INPUT 90/260VAC 50/60Hz
OUTPUT 24/30V DC 120W FUSE: 3,15 A
DIMENSIONS: 138x180x67 mm WEIGHT: 950 g

DECLARATION OF CONFORMITY



KOLVER S.r.l.
Via M. CORNER, 19/21 - 36016 THIENE (VI) - ITALY

Declares that the new tool here described:
Control unit Model EDU 1BR/SG
Is in conformity with the following standards and other normative Documents:
98/37/CE, 89/336/CE and 2006/95/CE,
EN50144-1 and EN60204-1
It is also in conformity with RoHS normative.

Name: Giovanni Colasante
Position: Managing Director

Giovanni Colasante
KOLVER S.r.l.

GENERAL SAFETY RULES

WARNING:

when using control unit, basic safety precaution should always be followed to reduce the risk of fire, electric shock and personal injury. Please read all the instructions contained in the Operator's Handbook of Kolver electric screwdrivers before using it.

Before connecting the power supply and control unit to the socket, please check the voltage you are using is that indicated on the label of the unit itself.

1. Applications

KOLVER control units are used with Kolver electric screwdrivers to tighten torque screws, nuts, studs and any other kind of threaded connection to any material.

2. Use

KOLVER screwdriving system is composed by a screwdriver, a cable with 2 x M12 female 8 pin connectors and a power supply and control unit. To install it please follow the instructions.

- Connect the 8-pin connectors of the cable to the controller EDU 1BR and to the screwdriver and tighten the relevant nuts.
- Connect the controller plug to a main supply socket 90 / 230V- 50/60Hz.
- Switch the controller on through the black button on the back panel.
- Select the desired setting of speed (SPEED), slow start (RAMP) and torque (TORQUE) options through the relevant knobs. Two ranges of torque are selectable through the TORQUE RANGE switch. Please make sure that such options are compatible with the torque setting.
- Similarly, the slow start setting should be chosen according to the torque that must be reached at full speed and not when the slow start is still in action.
- Do not slide the forward/reverse while the motor is running, it's dangerous for the motor!
For a long life of motor not pass over 60° C when it works.

3. Control unit and power supply / Adjusting torque

EDU 1BR/SG power supply and control unit acts as voltage transformer and electronic torque controller. The power supply (90/260VAC-50/60Hz), is converted into 40VDC required by the BRL (brushless) series through an electronic transformer with a constant power of 120W. The electronic control circuit cuts the power supply when the current reaches the setting level. On the front panel of the controller there are three knobs . The knob "RAMP" is used to adjust the slow start option (ramp) from 0 to 2 seconds, i.e. the motor will reach the nominal speed gradually. Dial "1" for no ramp and "10" for maximum ramp. Knob "SPEED" is used to adjust the motor speed for nominal speed, i.e. speed as per ctg. data sheet, to 60% of nominal speed. Dial "1" for minimum speed and "10" for nominal speed. Knob "TORQUE" is used to set the torque range. Two ranges of torque are selectable through the TORQUE RANGE switch. Level "L": the range is approx. from 0 to 30 % of the data sheet screwdriver range. Level "H" :the range is approx. from 20% to 100 % of the data sheet screwdriver range. The temperature of the unit can normally reach 45°C.

OFFSET CALIBRATION SCREWDRIVER:

When the screwdriver is used for the first time, we suggest to calibrate the offset in the control unit so that the full range of torque may be achieved. Please follow the instructions:

- Switch the control unit off,
- Connect the screwdriver in order to run clockwise
- Push start and keep on pushing,
- Switch the control unit on.

After 5 secs, the motors will start running at different speeds until the end of the offset cycle.

Repeat this procedure either in L and H range.

Do this once; it will not be necessary to repeat it anymore, unless you change the screwdriver.

FRONT PANEL LIGHTS:

On the front panel you can also see 3 lights: the green one (POWER) will light permanently when the power is on; the yellow one (TORQUE) will light only when the torque has been reached and the red one (ERROR) will light only when the torque is not correct (screw closed or torque reached during the RAMP time).

BACK PANEL I/O

EDU1BR/SG can be used with any Kolver BRL screwdriver, either lever, inline, pistol type or CA version.

CONTACT INPUT					OUTPUT 24V 0,5W				
COM 0 VDC	2 START	3 REVERSE	4 STOP	5 TORQUE H/L	6 TORQUE	7 LEVER	8 ERROR	COM 0 VDC	NOT USED
1	2	3	4	5	6	7	8	9	10

The back panel contains only one connector. Input contacts: start, reverse and stop motor; and adjustable torque range H/L (through contact). Output signals: torque, pressed lever and error (24V 20mA).

- Capability to START and stop the screwdriver by a contact between PIN1 and PIN2.
- Capability to REVERSE rotation of the screwdriver by a contact between PIN1 and PIN3
- Capability to STOP the motor in any moment by a contact between PIN1 and PIN4
- Capability to choose the TORQUE RANGE L by a contact between PIN1 and PIN5. On the front panel the torque range switch must be put on H position.
- Capability to check the torque reached through an high active signal 24V DC between PIN1 and PIN6 (TORQUE SIGNAL).
- Capability to check the lever through an high active signal 24V DC between PIN1 and PIN7 (LEVER SIGNAL).
- Capability to check the error (screw closed or torque reached during the RAMP time) through a high active signal 24V DC between PIN1 and PIN8 (ERROR SIGNAL).

The torque, lever and error signal goes out when you release the lever.

4. Maintenance

The EDU 1BR/SG control unit is a maintenance free unit.

On the back panel you can find a socket equipped with a fuse holder and on/off switch. To replace the fuse just pull out the fuse holder and change the fuse.

Always remember to switch off the control unit at the end of each working shift.

5. Warranty

KOLVER warrants its products for a period of one year from the date of original purchase. Any products which examination proves to be defective in workmanship on material will be repaired or replaced free of charge during the warranty period. For repair or replacement return the product, transportation prepaid, to your nearest KOLVER service center. This warranty does not repair or replacement required as a consequence of misuse, abuse, or normal wear and tear.