ELECTRONIC ROTARY GEAR MOTOR
Series SED (AR2...SE...)

The SED rotary gear motors are newly conceived and have been specially designed to be installed on industrial combustion systems.

They are particularly suitable to control modulating valves, butterfly valves, ball valves, dampers and other devices for the regulation of fluids in air conditioning and heating systems.

The electric motor is unipolar and bidirectional with high static and maintaining torque.

Analogic input signal: current or voltage change.

TECHNICAL FEATURES

Body and cover	:	die-cast aluminium	Supply voltage	: 24 Vac / 50 – 60 Hz
Nominal torque	:	4 ÷ 20 Nm	On request	: with trafo 115V~ up to 24 V~
Maintaining torque	:	4 ÷ 20 Nm		with trafo 230V~ up to 24 V~
Rotation time	:	7,5 ÷ 60 s. for 90° at 50 Hz	Nominal load	: 7 VA
			Standard input signal	: 4 ÷ 20 mA or 0 ÷ 10 V D.C.
Rotation angle	:	standard 90°	Standard output signal	: 4 ÷ 20 mA or 0 ÷ 10 V D.C.
Output shaft	:	□ 9,5 mm	Duty cycle	: continuous 100%
Installation	:	in any position	Power consumption	: 7 VA
Ambient temperature	:	-10 ÷ +60 °C	End / Aux. switches rating	: 0,5 A / 48 V D.C. and Vac
			Enclosure	: IP54 acc. to IEC 529
Weight	:	~2,5 kg	On request	: IP65 acc. to IEC 529
			Cable gland	: 2 x Pg 13,5

FEATURES

- Interchangeability with the most available gear motors
- Sturdy compact, suitable for industrial applications
- Installation in any position
- Mechanical position indicator
- Easy adjustment of the clutch-type cams
- Manual/Automatic operation and service switch Open/Close/Stop
- n. 2 adjustable auxiliary microswitches
- clockwise or counter-clockwise rotation adjustable
- high or low setting of actuator sensitivity to signal change
- Wide range of accessories on request:
  - output signal: 4 ÷ 20 mA or 0 ÷ 10 V D.C
  - Multipolar connector for electric wiring
  - auxiliary shaft 8 mm Ø or □ 9,5 mm [max. 3 Nm]

SED = **Electronic gear motor**

Supply voltage

A = 24Vac ± 10% / 50-60Hz

B = with tranformer 115Vac up to 24Vac (+6%-10%/50-60Hz)

C = with tranformer 230Vac up to 24Vac (+6%-10%/50-60Hz)

		Rotation time a 50Hz	Rated torque	Maintenance torque
0	=	7,5 for 90°	4 Nm	4 Nm
1	=	15 for 90°	7 Nm	7 Nm
2	=	30 for 90°	15 Nm	11 Nm
3	=	60 for 90°	20 Nm	20 Nm

Potentiometer

00 = none

15 = 2,5 kohm (Bourns)

Auxiliry microswitches

2 = 2 pc. [standard]

Auto/Man control station

S = AUTO/MAN Control station and Open/Stop/Close [standard]

Accessories/Control signal

E1 : in 0 ÷ 10 Vdc out 0 ÷ 10 Vdc +reg.+inv.(N)

E2 : in 0 ÷ 10 Vdc or 4 ÷ 20 mA out 0 ÷ 10 Vdc +reg.+inv.(N)

E4 : in 0 ÷ 10 Vdc

E5 : In 4 ÷ 20 mA

E7 : In 4 ÷ 20 mA out 0 ÷ 10 Vcc

E8 : in 4 ÷ 20 mA out 4 ÷ 20 mA [standard]

Mn : Multipolar connectors + **En**

6n : 160° rotation + **En**

8n : 180° rotation + **En**

1n : Auxiliary shaft Ø 8 mm + **En**

2n : Auxiliary shaft □ 9.5 mm + **En**

Fn : F4 flange + **En**

Dn : Clockwise rotation + **En**

Zn : Enclosure IP65 + **En**

SED **A** **3** **00** **2** **S** **E8**

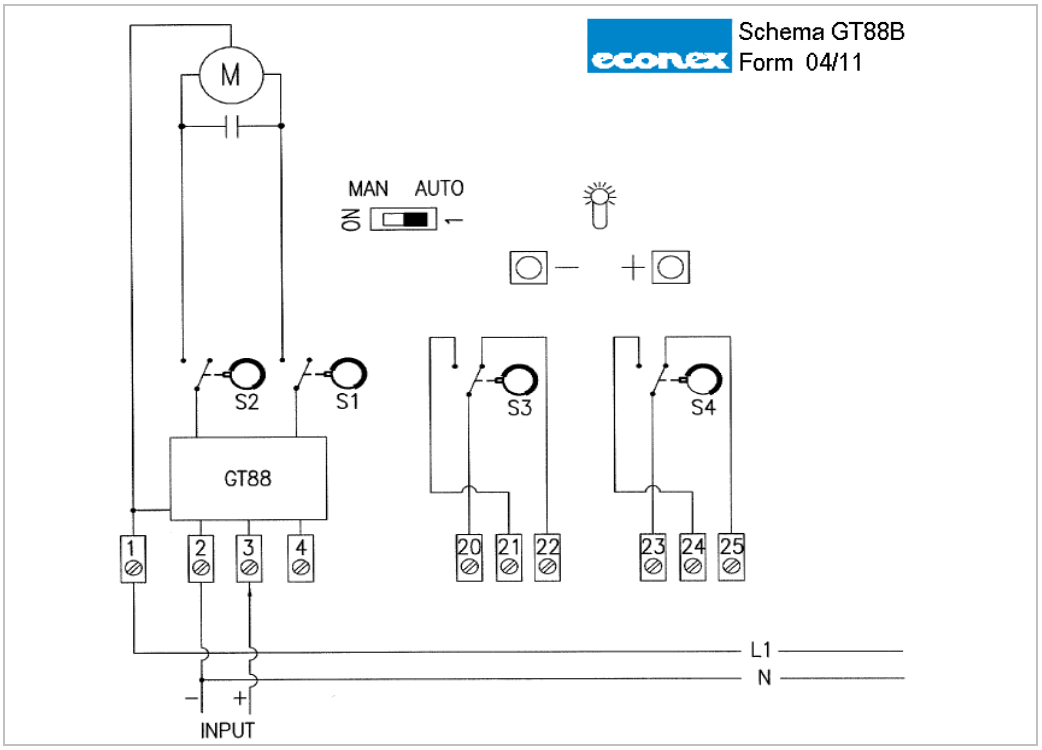
MODELS

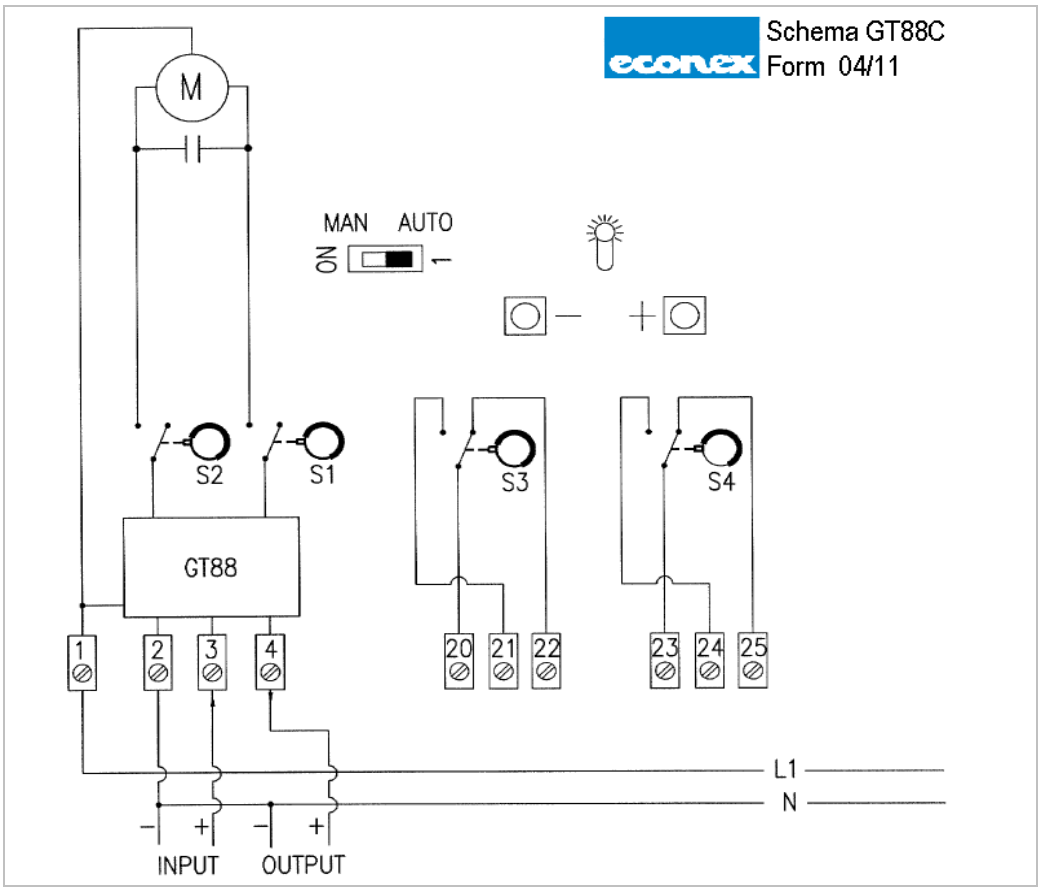
Model	Rated and maintenance torque [Nm]	Rotation for 90° with 50 Hz [sec.]	Power Consumption [Va]	Weight [Kg]
SEDA0002SE8*	4	7,5	7	2,5
SEDA1002SE8*	7	15		
SEDA2002SE8	15 / 11	30		
SEDA3002SE8	20	60		

*** on request**

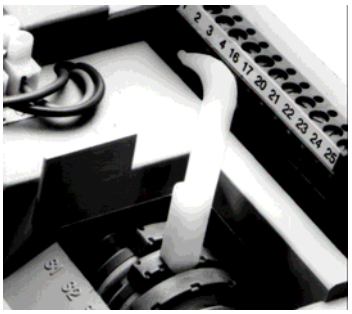
NOTE: the max. torque on the auxiliary shaft is 3 Nm. less than nominal torque

WIRING DIAGRAM



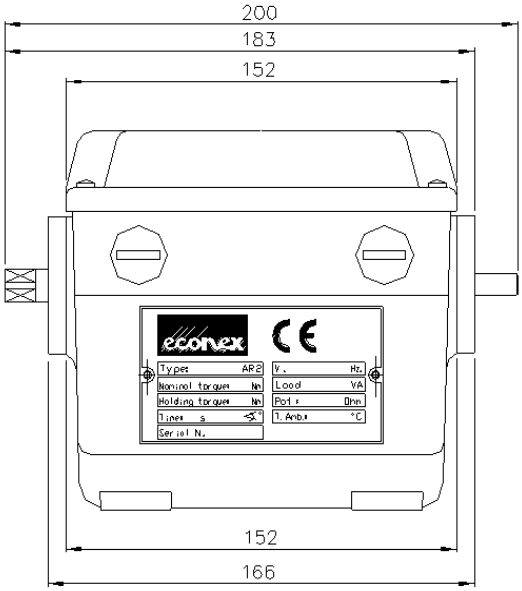


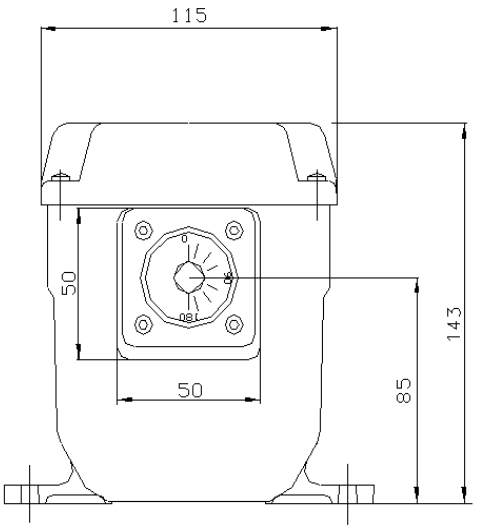
CAM ADJUSTMENT

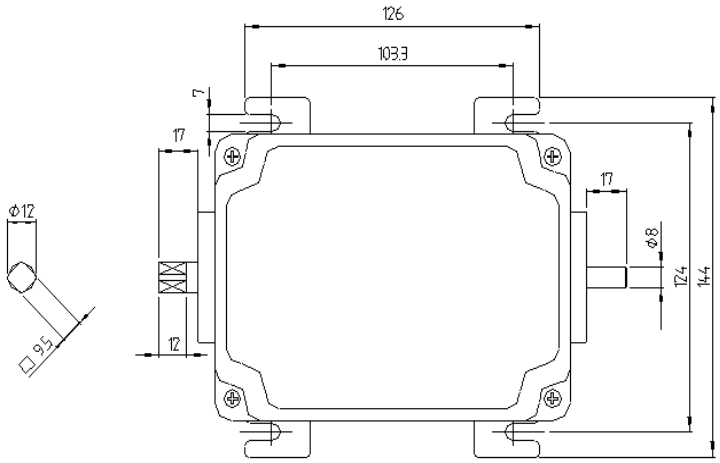


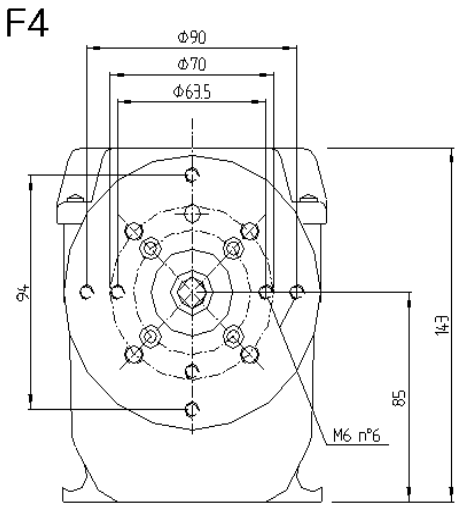
For cam adjustment the proper lever supplied with the gear motor equipment is to be used. Use the lever from the right side, introducing the pin into one of the bores on the sides of the blue cam and lever it to the desired position.
If the blue cam is in a behind position, use the lever on its curved side to move the blue cam to a more suitable position to perform adjustment. Adjustment is possible in both directions along the whole rotation angle of the cam shaft. Remove the lever before servicing.

DIMENSION









All the reported data are subject to be changed without notice.