### **ATTENTION**

# I . PLEASE START WITH READING THESE IMPORTANT SAFETY RULES

- 1. Installation and wiring must be in compliance with your local building and electrical installation codes. Power cables must only be connected to a properly earthed supply.
- 2. It is important to make sure that the gate always runs smoothly. Gate which stick or jam must be repaired immediately. Employ a qualified technician to repair the gate, never attempt to repair it yourself.
- 3. Keep additional accessories away from children. Do NOT allow children to play with pushbutton or remote controls. A gate can cause serious injuries as it closes.
- 4. Disconnect electric power to the system before making repairs or removing covers.

  A disconnecting device must be provided in the permanently- wired installation to guarantee all-pole disconnection by means of a switch (at least 3mm contact gap) or by a separate fuse.
- 5. Make sure that people who install, maintain or operate the gate operator follow these instructions. Keep these instructions in a safe place so that you can refer to them quickly when you need.
- 6. After the installation a final test of the full function of the system and the full function of the safety devices must be done.

## $\ensuremath{\mathrm{II}}$ . Main specifications and technical parameters

ITEM NO.	16	18	21	22	24	35	38	45
Power supply	AC230	AC230	AC230	AC230	DC	AC230	AC	AC230
	/120V	/120V	/120V	/120V	24V	/120V	380V	/120V
Motor speed	1400	1400	1400	1400	2200	1400	1400	1400
	RPM	RPM	RPM	RPM	RPM	RPM	RPM	RPM
Output Torque	20Nm	22Nm	27Nm	27Nm	20Nm	35Nm	38Nm	45Nm
Gate speed	12	12	12	12	16	12	12	12
	m/min	m/min	m/min	m/min	m/min	m/min	m/min	m/min
Max gate weight	500	700	1	1	300/	1.2	1.5	2
	KG	KG	TON	TON	500KG	TON	TON	TON
Working temperature	-45℃-	-45°C-	-45°C-	-45℃-	-45°C-	-45℃-	-45℃-	-45℃-
	+65℃	+65°C	+65°C	+65℃	+65°C	+65℃	+65℃	+65℃
Noise	≤56dB	≤56dB	≤ 56dB	≤ 56dB	≤ 56dB	≤ 56dB	≤ 56dB	≤ 56dB
Protection class:	IP44	IP44	IP44	IP44	IP44	IP44	IP44	IP44
Certificate	CCC	CCC	CCC	CCC	CCC	CCC	CCC	CCC
	CE	CE	CE	CE	CE	CE	CE	CE

#### III. Install steel basement

The gate operator should be fitted on to the threaded bolts in the basement. The weight of the gate should not be borne by the cog wheel. (See the Fig.1)

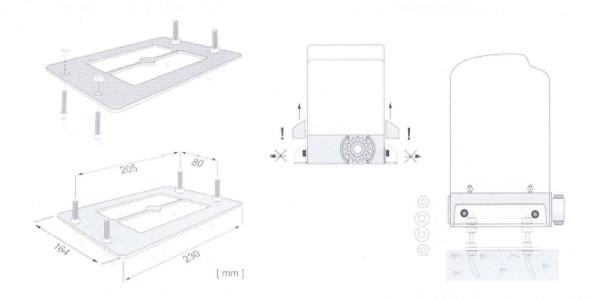


Fig.1

#### IV. Mounting gear rack

The easiest way to fit the gear rack is to first place it on the gate operator's cog, disengage the gate operator and, by pushing the gate further with the gear rack, screwing the rack bit by bit firmly in position. In this way, you ensure that the gear rack engages with the cog wheel in an optimum manner. While doing this, do not forget to mark each fixing point. (Fig.2) There is a gap of approx. 0.2mm between the cog wheel and the gear rack bar.



Fig. 2

#### V.Gate operator release mechanism (manual operation)

The gate operator is equipped with a lockable release mechanism to enable the gate to be operated manually in a power cut. The release mechanism is shown in Fig.3 and Fig.4 with the clutch disengaging the link between the cog wheel and the gear.

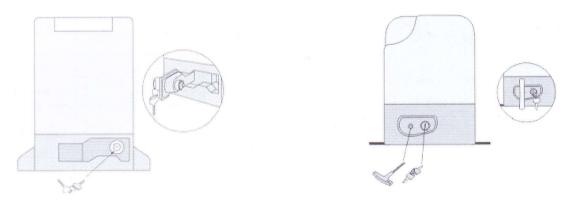


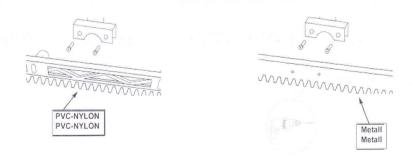
Fig.3 (NEW STYLE MOTOR)

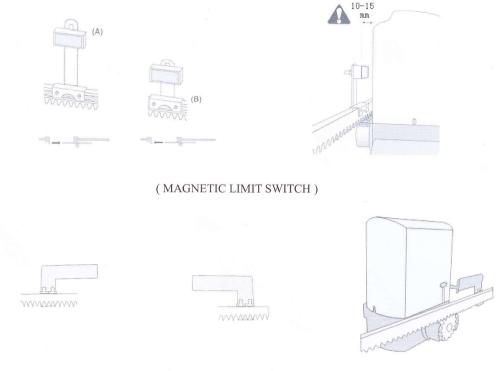
Fig.4 (OLD STYLE MOTOR)

#### VI.Fitting limited switches (to gate)

Fit the localizers of spring limited switch/ magnets and their brackets on to the gear rack in those places where the final travel positions are roughly expected to be. (Fig.5)

The spring of the gate operator with spring limited switch should just contact the incline of the localizers. The magnet should point towards the motor, and also the contact is located in the middle of the motor.





( SPRING LIMIT SWITCH )

Fig.5

## VII.Motor wire connection(see Fig.6):

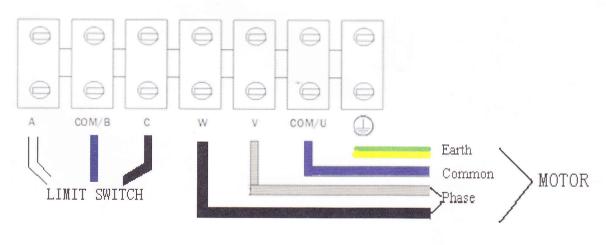


Fig.6

VIII. How to set the control board please see the manuals of control board