

BREL motors is part of:

**BREL** nederland b.v.

## Manual Brel 45mm standard radio motor

### Type MR45

**Read the manual before you begin the installation. If these instructions are not followed, this may lead to defects and injury in which warranty can't be claimed.**

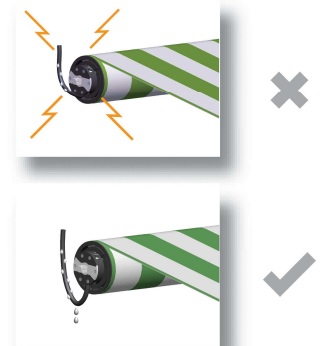
**warning:**

Children cannot recognize the dangers of electrical equipment and may therefore not work with it.

**It is important to follow this instruction for your own safety.**

1. Do not operate the motor in humid surroundings.
2. The motor must be installed correctly.
3. Keep the antenna in a good condition and do not shorten. The antenna should not come into contact with other metal parts otherwise it will reduce the effect.
4. The motor must be protected from direct moisture influences.
5. The motor should be installed with the motor cable down in order to prevent moisture via the motor cable is running in the motor . See Figure 1
6. It is prohibited to connect two motors on a switch without using a relay control.

Figure 1



#### Technical data of the motor

#### Type MR45-20

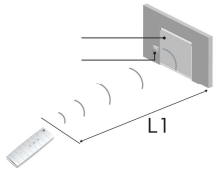
#### Type MR45-40

- |                                     |                 |          |
|-------------------------------------|-----------------|----------|
| • Motor Voltage:                    | AC 230V         | AC 230V  |
| • Power:                            | 145 Watt        | 198 Watt |
| • Torque:                           | 20 Nm           | 40 Nm    |
| • Speed:                            | 15 rpm          | 15 rpm   |
| • Ampèrage:                         | 0.64 A          | 0.86 A   |
| • Moisture and dust:                | IP44            | IP44     |
| • Working temperature of the motor: |                 |          |
| ○ Normal use:                       | -10°C tot +40°C |          |
| ○ Heavy use:                        | -20°C tot +70°C |          |

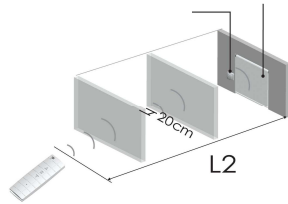


**Reach**

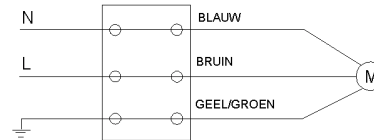
L1 = 100 meter



L2 = 25 meter



**Wiring chart**



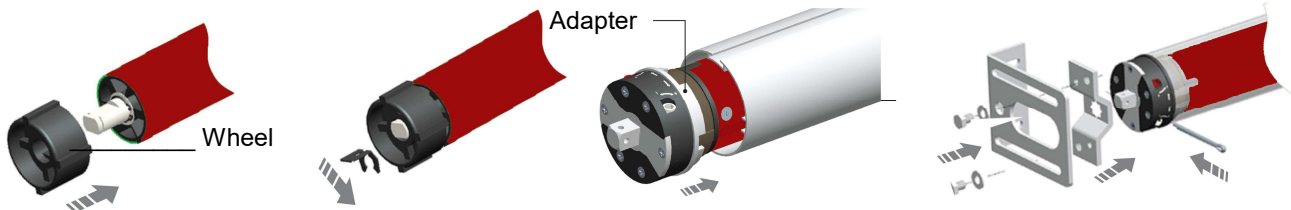
**Installing the motor**

Attach the crown and wheel to the motor and place the clip on the shaft of the motor so that the wheel is fixed to the motor.

Install the motor with the motorbracket on the product and take care that it is secured.

Place the motor in the tube of the roller/shutter.

(These assemblies are usually already done in the factory)



**Setting the end limits of the motor**

To determine where the motor must stop, you must use the supplied adjustment pin.

The large arrow indicates in which direction you change the end limits.



By turning to the **Plus** or **Minus** you can change the end limits.

By turning to the **Plus**, the motor will make more rotations.

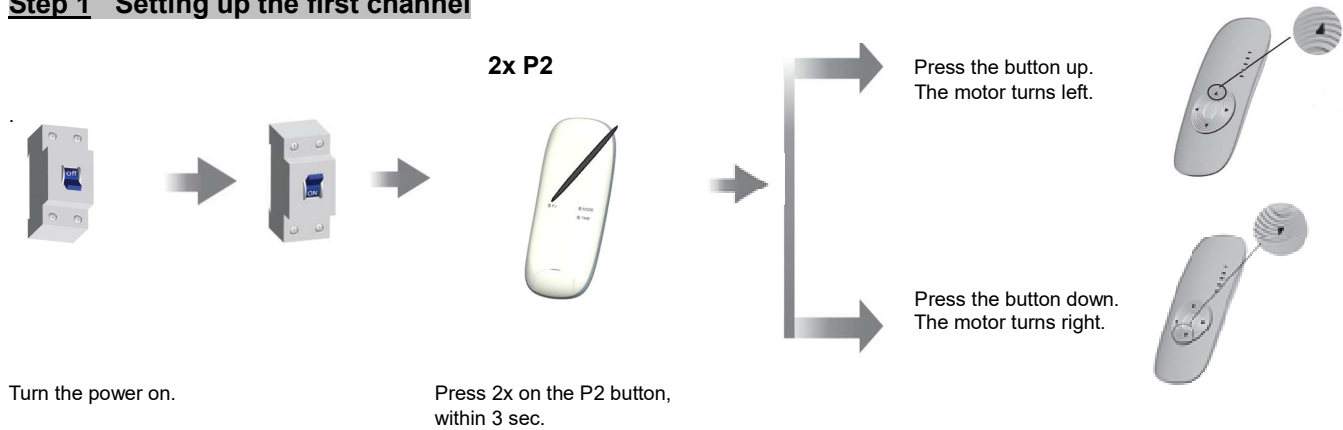
By turning to the **Minus**, the motor will make less rotations.

The setting needs to be done for both directions of rotation.

If the motor is stopped by it selves, do not make more than one rotation to the **Minus**.

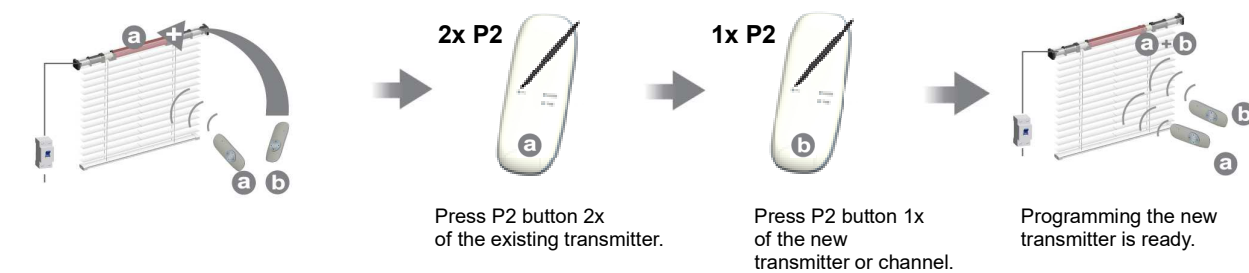
This can disrupt the adjustment.

**Step 1 Setting up the first channel**



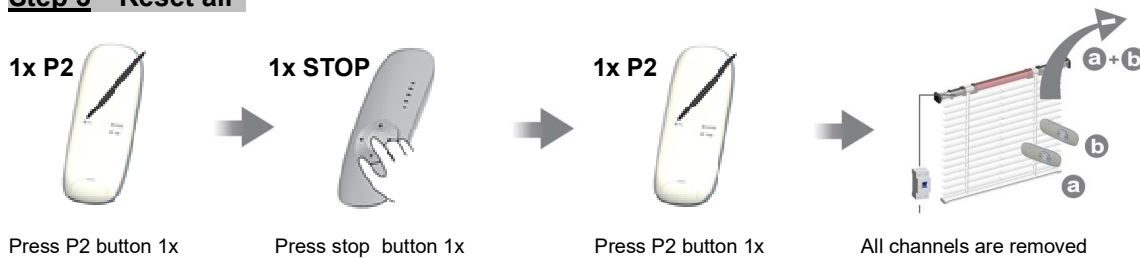
*If you have made the wrong choice in the above, you can again follow the described procedure. You should turn of the power more than 3 seconds. to enter the programming mode. The above procedure also makes the memory empty, all the old programming will be removed.*

**Step 2 Teaching multiple transmitters (Up to 20 transmitters per receiver)**

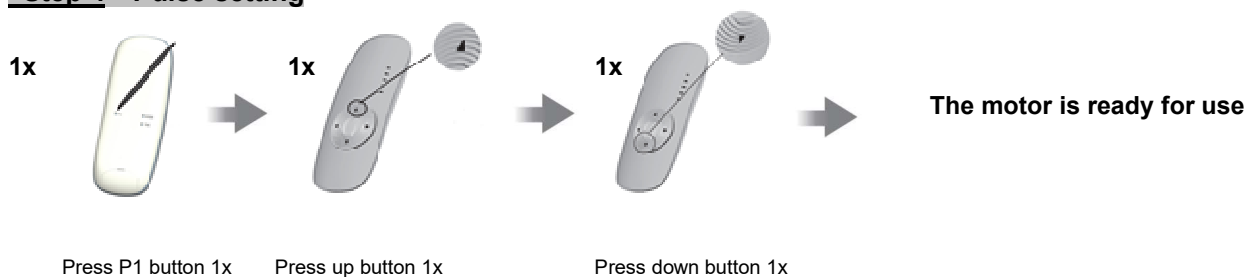


*To delete one channel , you must repeat the above operation.*

**Step 3 Reset all**



**Step 4 Pulse setting**



*To remove the pulse setting, repeat the above operation.*