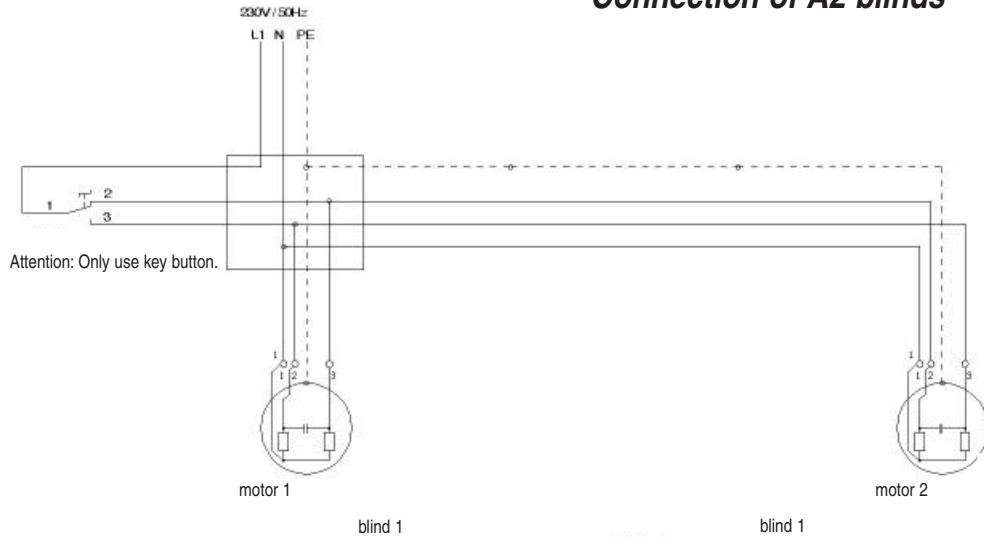


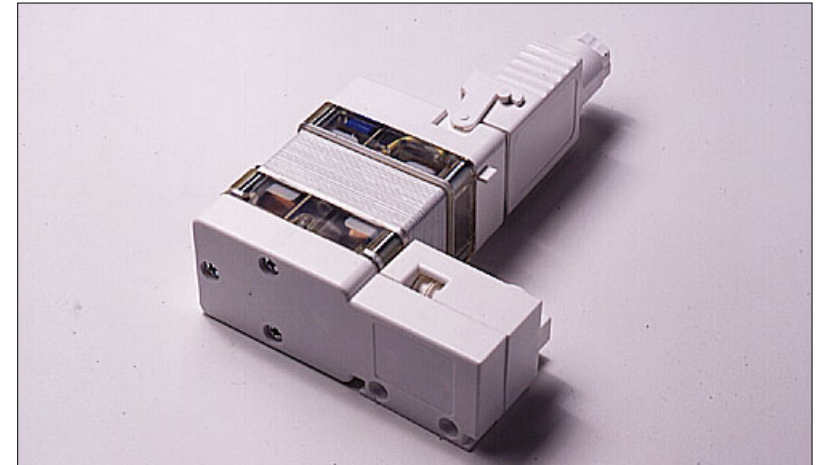
Attention !!

Elmatic motors do not have limit switches.
 Therefore you may only use key buttons.
 Remote controls may not admit operation by locking switch.

Connection of A2 blinds



sundrape® Technical Guidelines elmatic motor



Attention! Please do not miss to read!

Please read the instructions for use carefully. In case of damages that have been caused by disregard of the instructions for use, the guarantee expires. For consequential damages resulting of it, we do not assume any responsibility.

Subject to technical modifications • 10.2009

Voltage:	230V
Frequency:	50Hz
Revolutions/min:	750 min ⁻¹
Engine torque:	8,6 Ncm
Power consumption:	14 VA
Power output:	6,7 W
Lock	1,5 Ncm
Nominal current:	62 mA
Capacitor:	0,47µF
Duty type:	Continuous duty
Protective system:	IP 42
max. temperature of motor allowed:	120° C
Weight without gear:	550 g
Engine torque at gear exit:	156 Ncm
Power output at gear exit:	6,7W
Revolutions/min. at gear exit:	41 U/min
Duration of one louvre rotation:	abt. 9,5 sec.

Instruction for electrical connection of **sundrape® electric vertical blinds**

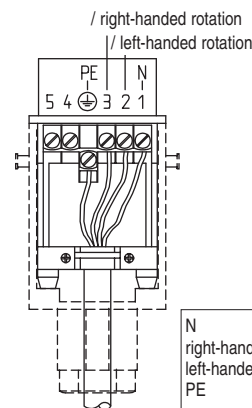
Before installation of the electric drive, all unnecessary wires are to be taken away and existing installations which are not necessary for a use with electric supply are to be deactivated. When mounting electric drives which are operated by touch contact switch, the touch contact switch has to be installed near the system, however at a safety distance to moving parts and above a height of 1,5 m. For drives delivered without moving parts, the reference turning moment and the reference working duration have to be compatible with the characteristics of the running part.. Do not exceed the maximum turning moment. In case you need more detailed information, please contact the manufacturer.

1.Important security advices

Attention – to assure the security of persons, it is absolutely necessary to observe these instructions.

The instructions have to be filed. Children are not allowed to play with stationary control systems, remote control devices have to be kept away from children. The system has to be controlled frequently on signs of wear or damaged cables.

2. Important security instructions for the mounting ATTENTION – wrong mounting may lead to severe injurier. Observe all - mounting instructions – particularly the connection instructions on page 4.



N	= neutral conductor	(neutral blue)
right-handed rotation	= control wire	(right brown)
left-handed rotation	= control wire	(left black)
PE	= protective conductor	(PE yellow/ green)

Instruction for electrical connection for **sundrape electro Vertical blinds**

Connections and supply lines to be installed at the building-site by authorized electro-firms in compliance with official regulations. Control types for **sundrape® Star Zug Elmatic electro blinds:**

single
in groups
by radio remote control

Cable laying plans and wiring diagrams are submitted on request.

Data motor plug:		Technical data:	
type	TK3 = 4 pole	voltage rating	220 V - 230 V 110 V
voltage	250 VAC	nominal rating abt	15 W 15 W
fuse protection	10 A	rated current	0,13 A 0,26 A
system of protection	IP 30	frequency	50 Hz 60 Hz
group of isolation	B	operation mode	S3 50 % S3 50%
		direction of rotation	ri + le ri + le

for dry rooms only

*) test cable type A1 order No. 206 032
test cable type A2 order No. 206 033

No warranty if these instructions are not followed. Subject to technical modifications.



Safety instructions

Before starting sundrape® electric motors, group controls and radio remote controls carefully read technical instructions for connexion, mounting and operation.

In case of damages caused by disregarding these instructions, the guarantee expires. For consequential damages we do not assume any responsibility.

Attention – to assure the security of persons and facilities these instructions have to be observed absolutely! File the instructions carefully!

This device is not designed for employees (including kids) with limited physical or mental skills or sensory perception or for persons with a lack of experience or knowledge, unless they are supervised by a person who is responsible for their security or unless they received instructions how to use the device.

Children are not allowed to play with stationary controls and electrical systems. Keep radio remote control devices away from children! Kids should be watched to make sure that they do not play with the device.

The system has to be checked regularly on signs of wear or damaged electrical lines.

Attention – inadequate mounting can cause severe injuries!

Before you start maintenance work on electrical blinds, always cut off power supply. The same applies to window cleaning work, if contact of humidity and cleaning agents with the electrical systems is possible.

Connexion instructions for sundrape® electric motors

Connexions and supply lines have to be passed on site by authorized electricians according to VDE (German Electrical Engineering Association) and local EVU (electric supply company) instructions.

For controls of two and more motors a group control is required. Cable laying plans and wiring diagrams for group and central controls as well as remote controls can be submitted on request. Switch off unused lines and systems before you connect the motor. Place push-buttons above a height of 1,5 m near the system.

Allowed running periods and torques have to correspond with the motor's technical data.

In order to avoid backing ups of condensers of running motors, parallel connexion of two or more motors at one exit is prohibited. For decoupling purposes a separate contact for each direction of rotation is required. Use only mechanically or electrically locked switches and push-buttons. Switches and controls may not permit concurrent up and down operation! The time to change the running direction from up/down to down/up has to be at a minimum of 0,5 seconds. This applies also for programmable control devices.