



Product specification sheet Metacon-Next



ISO Light

burglar-resistant insulated roller shutter

ISO Light

CERTIFICATION

CE marked in accordance with

EN 13241:2003 + A2:2016

safety and performance requirements for industrial doors

TECHNICAL SPECIFICATIONS

Min. dimensions (total measures)	width 1.000 mm, height 500 mm, opening 0,5 m ²
Max. dimensions (total measures)	width 8.000 mm, height 6.500 mm, opening $\pm$ 30 m ²
Maximum cycles per day	8 cycles
Opening speed	$\pm$ 130 mm/sec
Closing speed	$\pm$ 130 mm/sec
Installation	on the wall/opening or in the wall/opening
Standard operation	dead man's control
Recommended temperature range	between +5°C and +40°C

SPECIFICATION OF MATERIALS

Slats

Thickness	23 mm
Height	95 mm
Tread depth	20 mm
Profiling	2 interlocking profiled shells, thickness 0,4 mm, including foam filling
Weight	$\pm 9,8 \text{ kg/m}^2$
Material	double-walled, spherical galvanized steel
Thermal insulation value (U-value)	3,47 W/m ² K
Sound reduction value	22 dB

Bottom profile

Type	aluminum bottom rail, including rubber profile with a hollow chamber
Height	105 mm
Tread depth	23 mm
Weight	$\pm 2,5 \text{ kg/m1}$
Material	double-walled aluminum + EPDM 70 rubber profile

Side guides

Dimensions U guide profile	50 x 33 x 50 x 3 mm or 75 x 33 x 75 x 3 mm
Dimensions tube	50 x 50 x 2 mm or 50 x 80 x 2 mm
Weight	$\pm 7,5 \text{ kg/m1}$ per side guide
Material	galvanized steel

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Consoles / brackets

Types	square 250, 300, 350, 400, 450 or 500 mm, depending on the size of the roller shutter
Weight	± 5 kg per bracket
Material	galvanized steel

Tube / drive shaft

Dimensions	Ø 101,6, 133,0, 159,0 mm, 168,3 or 193,7 mm, depending on the size of the roller shutter
Weight	± 20 kg/m1
Material	electrolytically galvanized steel

Safety

Safety	safety catch device with integrated safety switch
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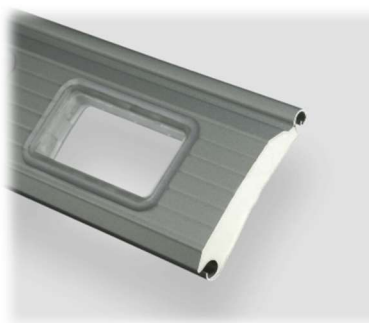
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OPTIONS

Application indoor/outdoor situation	yes
Max. wind class	3 <i>till max. width 6.000 mm</i>
Cover box roll/motor, galvanized steel	choice in front plate, top plate, rear plate <i>weight of ± 10 kg/m¹</i>
Emergency power supply	external battery/UPS with standby function, activated using the supplied key switch and adapter, allowing the roller shutter to be opened once <i>suitable for use in spaces between 0 and 40 degrees Celsius, not in dusty and/or humid environments</i>
Emergency operation	by a connecting rod, length 1.600 mm, for operating the tubular motor
External control switches	key switch up-down pressure switch up-stop-down rotary switch up-down
Optional operation	automatic, possible in combination with the control box MO 710 AMFN and a safety edge device (8 K2 Ohm), a set of photocell barriers (Ligi OSE-01) or a set of photocells (LS1 AP-ECO)
Handheld transmitter (for automatic operation)	2- or 4-channel, for use with the control box MO 710 AMFN and receiver circuit board
Mechanical lock	pen lock with bracket, cylinder and insulator box ground pot including lock
Floor/ceiling mounting	by floor plate and a sliding tube with mounting plate

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Optional color slats (standard colors)	RAL 3000, 5010, 6009, 7005, 7016, 7044, 8014, 9002, 9006, 9007, 9016
Optional color slats (based on coating)	various RAL colors, single layer, C3 class, $\pm 70\%$ gloss level, coating layer thickness ± 80 to 100μ
Optional color finish side guides and cover box	various RAL, NCS and Sikkens colors by means of coating standard gloss level $\pm 70\%$ optional gloss level $\pm 30\%$, matt standard classification C3; single layer, layer thickness ± 80 to 100μ optional classification C4 or C5; 3-layer, layer thickness ± 180 to 240μ
Slats fitted with viewing windows	yes, $100 \text{ mm} \times 50 \text{ mm}$ (w x h), max. 6 windows per meter; $\pm 35\%$ light transmission per m^2
Slats fitted with ventilation grilles	yes, $100 \text{ mm} \times 55 \text{ mm}$ (w x h), max. 6 grilles per meter; $\pm 5\%$ air permeability per m^2



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OPERATION



Tubular motor T6 (DMI) (emergency manual control)

SIMU, types T6-40 t/m 120 Nm

Tubular motor T8 (M) T8S (DMI) (emergency manual control) SIMU, types T8-130 t/m 450 Nm

Control box

Tedsen MO 713 (dead man control)
Tedsen MO 710 AMFN (automatic operation)

Required power supply

1N~230 Vac $\pm$ 10%, 50 Hz

Cable length at the control box

1.500 mm

Standard operation

dead man's switch (hold the switch down; the door stops when you let go)

Optional operation

automatically operated (override contact), can be used in conjunction with a safety edge device or a set of photocell barriers

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Specifications tubular motors SIMU T6

	T6-40	T6-60	T6-80	T6-100	T6-120
Revolutions per minute (rpm)	17	12	12	12	12
Maximum number of revolutions	28	28	28	28	28
Power consumption (W)	240	240	290	350	400
Torque (NM)	40	60	80	100	120
Mains voltage	230V AC / 50Hz	230V AC / 50Hz	230V AC / 50Hz	230V AC / 50Hz	230V AC / 50Hz
Cable length on tubular motor	2,5 meters	2,5 meters	2,5 meters	2,5 meters	2,5 meters
Current at no load (AMP)	1.05	1	1.2	1.4	1.5
Current at full load (AMP)	1.1	1.1	1.35	1.6	1.8
Current with shaft blocked (AMP)	1.6	1.6	1.95	2.3	2.5
Starting current (AMP)	± 2,5A	± 2,5A	± 3,0A	± 3,5A	± 3,8A
Cycles per 24 hours	8	8	8	8	8
Duty cycle (min)	4	4	4	4	4
Protection class	IP44	IP44	IP44	IP44	IP44

Specifications tubular motors SIMU T8

	T8-130	T8-150	T8-200	T8-250	T8-300	T8-350	T8-450
Revolutions per minute (rpm)	130	150	200	250	300	350	450
Maximum number of revolutions	17	17	17	17	17	15	15
Power consumption (W)	450	450	710	710	855	920	1200
Torque (NM)	130	150	200	250	300	350	450
Mains voltage	230V AC / 50Hz	230V AC / 50Hz	230V AC / 50Hz	230V AC / 50Hz	230V AC / 50Hz	230V AC / 50Hz	230V AC / 50Hz
Cable length on tubular motor	2.5 meter	2.5 meter	2.5 meter	2.5 meter	2.5 meter	2.5 meter	2.5 meter
Current at no load (AMP)	1.6	1.8	1.8	3.1	3.13	3.2	3.5
Current at full load (AMP)	1,9	2	2.5	3.2	3.9	4.4	5.3
Current with shaft blocked (AMP)	2.5	2.7	2.8	6.4	6.9	5.4	10.1
Starting current (AMP)	5.3	5.8	6	13.6	13	11.5	21.5
Cycles per 24 hours	8	8	8	8	8	8	8
Duty cycle (min)	4	4	4	4	4	4	4
Protection class	IP44	IP44	IP44	IP44	IP44	IP44	IP44

Specifications control box Tedsen MO 713

type	specification
Housing dimensions (L x W x H)	175 mm x 175 mm x 75 mm
Protection rating	with compression fittings (IP54), with PG glands (IP65)
Standby power consumption at 230V 50Hz	± 3,7 W without the receiver circuit board ± 4,6 W with the EKXR710 receiver circuit board
Mains voltage	230 VAC ± 10%, 50 Hz
Weight including housing	± 780 grams
Permissible storage temperature	-20°C to +70°C
Permissible operating temperature	-10°C to +50°C
Relative humidity	95% non-condensing
Motor	230V single-phase AC motor, max. 1500 VA
Uext	24 V DC and 12 V DC, total current draw max. 100 mA

Specifications control box Tedsen MO 710 AMFN

type	specification
Housing dimensions (L x W x H)	250 mm x 175 mm x 75 mm
Protection rating	with G503 cable glands (IP67), with PG cable glands (IP65)
Standby power consumption at 230V	± 3,7 W without the receiver circuit board ± 4,6 W with the EKXR710 receiver circuit board
Mains voltage	230 VAC ± 10%, 50 Hz
Weight including housing	± 800 grams
Permissible storage temperature	-20°C to +70°C
Permissible operating temperature	-10°C to +50°C
Relative humidity	95% non-condensing
Max. motor current at the output MO710A / AF	for a 230 V AC motor, max. 10 A
Mains fuse (glass fuse on the circuit board)	10A slow-blow fuse for the motor, control system and connected lights
Terminating resistance of protection devices	8.2 kΩ ± 5% for protection devices with resistance measurement

