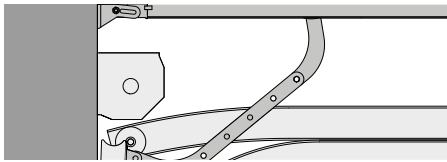


HALO



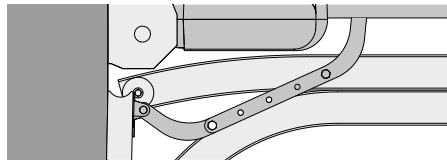
**ELECTROMECHANICAL GEAR
MOTOR FOR SECTIONAL DOORS**

KEY
AUTOMATION



CLASSIC INSTALLATION

With head in the center of the garage



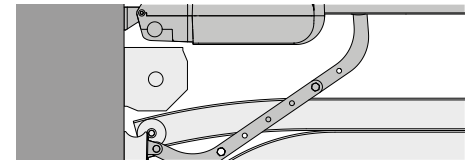
CROSS BEAM INSTALLATION

All wiring remains on the cross beam

Reinforces the spring shaft for added rigidity

Shorter installation times

Less weight projecting into centre of garage



SPRING SHAFT INSTALLATION

All wiring remains on the cross beam

Shorter installation times

Less weight projecting into centre of garage

MODELS

CODE	DESCRIPTION	PCS PALLET
HA8	For sectional doors up to 11 sqm (with 3 m rail) or 12 sqm (with 4 m rail), a 24 Vdc motor and a control unit with integrated receiver	104
HA12	For sectional doors up to 16 sqm (with 3 m rail) or 19 sqm (with 4 m rail), a 24 Vdc motor and a control unit with integrated receiver	104

RAILS

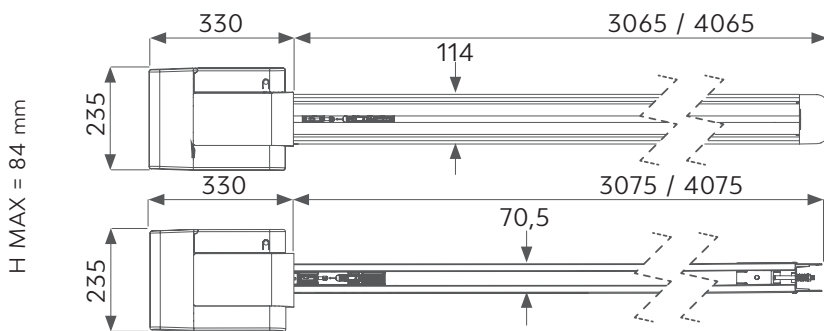
CODE	DESCRIPTION
RAL31	Aluminum belt rail with integrated LED lighting, 3090 mm (1x3m) one-piece rail
RAL41	Aluminum belt rail with integrated LED lighting, 4090 mm (1x4m) one-piece rail
RAB3X1P	Steel belt rail, 3100 mm (3x1.03m) 3-pieces rail
RAB2X2P	Steel belt rail, 4100 mm (2x2.05m) 2-pieces rail
RAB31	Steel belt rail, 3100 mm (1x3.1m) one-piece rail
RAB41	Steel belt rail, 4100 mm (1x4.1m) one-piece rail
RAB61	Steel belt rail, 6200 mm (2x3.1m) 2-pieces rail

TECHNICAL DATA

	HA8	HA12
MECHANICAL DATA		
speed	cm/s	15
force	N	800
max cycles/hour ⁽¹⁾		20
ELECTRICAL DATA		
power supply	Vac	230 (±10%) 50Hz
flashing	W	3 max
courtesy light on rail with integrated LEDs	W	40 max
accessories power output	mA	100 (24 Vdc not regulated)
max no. of transmitters that can be stored		90
ROLLING CODE		90
GENERIC DATA		
degree of protection	IP	20
dimensions (L x D x H):	mm	330 - 235 - 84
weight	kg	6,5
working temperature	°C	-10 + 45
maximum door size	m ²	19
maximum door weight	kg	200

⁽¹⁾ for 2,4x2m LxH door. Data are subject to smoothness and balance of the door and the type of rail used

DIMENSIONS



H MAX = 84 mm

COMPATIBILITY HEAD - RAIL

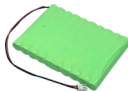
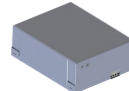


















	HA8	HA12
RAB31	X	X
RAB2X2P	X	X
RAB3X1P	X	X
RAB41	X	X
RAB61		X
RAL31		X
RAL41		X

LIMIT USE

Sectional	Up-and-over slide-away
HA8 with 3 m rail	
S max=11m ² - H max = 2,6m	S max=10m ² - H max = 3m
HA8 with 4 m rail	
S max=12m ² - H max = 3,6m	S max=11m ² - H max = 3,4m

Sectional	Up-and-over slide-away
HA12 with 3 m rail	
S max=16m ² - H max = 2,6m	S max=16m ² - H max = 3m
HA12 with 4 m rail	
S max=19m ² - H max = 3,6m	S max=17m ² - H max = 3,4m

ACCESSORIES

 KBPN Kit of 1.3 Ah lead battery and battery charger PC 1	 KBP Kit of 1.3 Ah lead battery and battery charger PC 1	 HAL2 Swinging arm for counterweight overhead doors PC 1	 HAL7 Motor support bracket, L=1400 mm. For up and over doors PC 1	 HAL1S Kit for external unlock with key and metal cord for insulated overhead doors PC 1
 SBLST Kit for external unlock with key and metal cord for uninsulated overhead doors PC 1	 HAL3 Kit supplementary fixing ceiling rail (for steel rail) PC 1	 HAL4 Kit 2 supplementary fixing clamps (for steel rail) PC 1	 HAL5 Kit supplementary fixing ceiling rail (for Led rail) PC 1	 HAL6 Kit for wall support (for Led rail) PC 1
 SBCO External unlocking system. L=3000 mm PC 1	 550CABL045A00 * Special cable for Eclipse flash light RG174 50 Ohm + 4 x 0,50 mm ² (100m) PC 1	 520STAF029A00 Fixing clamp PC 1	 TO1U Touch transmitter, 1 channel, rolling code, to be recessed in the door panel PC 1	 TO1M Touch transmitter, 1 channels, rolling code PC 1
 TO2M Touch transmitter, 2 channels, rolling code PC 1	 TO2MP Touch transmitter, 2 channels, with motion sensor PC 1	 DYL Programming module Cable length 120 cm (only 14A board) PC 1	 KUBE PRO Wireless module for programming PC 1	 KUBE Wireless controlling module for end user PC 1

* it is not recommended to use a connection longer than 4 m to avoid sensible loss of reach