

K400

مع / with L1 24V-CRX



See page 17



رسومات فنية للمشروعات

Technical drawings for projects



عامل Operator	مزود الطاقة Power Supply	ماكس بوابة الوزن Max gate weight	أقصى قوة دفع Max Thrust	الانفعال الأقصى Max torque	الشفرة Code
K400	230V 50/60Hz	400 kg / 881 lbs	434 N	14,7 Nm	AA40928
	120V 60Hz				AA40929

يتم ضمان التشغيل الصحيح للمشغل فقط في حالة إدارته بواسطة لوحة تحكم RIB
The correct operation of the operator is guaranteed only if it is managed by a RIB control panel

**ATTENTION - FOR THE SAFETY OF PEOPLE IT IS IMPORTANT TO FOLLOW ALL THE INSTRUCTIONS
KEEP THESE INSTRUCTIONS WITH CARE**

- 1° - If it is not forecast in the electric gearcase, install a switch of magneto thermic type upstream, (omni polar with minimum opening of the contacts of 3 mm) with a check of conformity to the international standards. Such device must be protected against the accidental lockup (for example by installing inside a locked board).
- 2° - For the section and the type of the cables RIB advises to use a cable of H05RN-F type with 1,5 sqmm minimum section and, however, to keep to the IEC 364 and installation standards in force in your country.
- 3° - Positioning of a possible couple of photoelectric cells: the radius of the photoelectric cells must be at a height of no more than 70 cm from the ground and at a distance not superior to 20 cm from the motion plane of the door. Their correct working must be verified at the end of the installation in accordance with the point D.3.2 of the EN 12453
- 4° - To fulfill the limits set by EN 12453, and in case the peak force exceeds the normative limit of 400 N it is necessary to have recourse to the active presence survey on the whole height of the door (up to max 2,5 m) - The photoelectric cells, in this case, must be applied in accordance with the point D.4.1 of the EN 12453.

N.B.: The earthing of the system is obligatory.

The data described in this handbook are purely a guide.

RIB reserves the right to change them in any moment.

Carry out the system in the respect of the standards and laws in force.

**IMPORTANT SAFETY INSTRUCTIONS FOR THE INSTALLATION
ATTENTION - THE INCORRECT INSTALLATION CAN CAUSE SERIOUS DAMAGES
FOLLOW ALL INSTALLATION INSTRUCTIONS**

- 1° - This handbook is exclusively addressed to the specialized personnel who knows the constructive criteria and the protection devices against accidents for motorized gates, doors and main doors (follow the standards and the laws in force).
- 2° - The installer will have to issue a handbook to the final user in accordance with the EN 12635.
- 3° - Before proceeding with the installation, the installer must forecast the risks analysis of the final automatized closing and the safety of the identified dangerous points (Following the standards EN 12453).
- 4° - Before installing the motion motor, the installer must verify that the gate is in good mechanical conditions and that it adequately opens and closes.
- 5° - The installer must install the member for the manual release at a height inferior to 1,8 m.
- 6° - The installer will have to remove possible impediments to the motorized motion of the gate (eg. door bolts, sliding bolts, door locks etc.)
- 7° - The installer will permanently have to put the tags warning against the deflection on a very visible point or near possible fixed controls.
- 8° - The wiring harness of the different electric components external to the operator (for example photoelectric cells, flashlights etc.) must be carried out according to the EN 60204-1.
- 9° - The possible assembly of a keyboard for the manual control of the movement must be done by positioning the keyboard so that the person operating it does not find himself in a dangerous position; moreover, the risk of accidental activation of the buttons must be reduced.
- 10° - Keep the automatism controls (push-button panel, remote control etc.) out of the children way. Command device for operating the motor (a switch manually closed) should be placed in area visible from the guided site and far from moving parts. It should be placed at least at 1,5 m height.
- 11° - this appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved
- 12° - children shall not play with the appliance
- 13° - cleaning and user maintenance shall not be made by children without supervision
- 14° - do not allow children to play with fixed controls. Keep remote controls away from children
- 15° - Fixed command devices should be installed in a well visible way.
- 16° - Before carrying out any installation, regulation or maintenance operation of the system, take OFF the voltage by operating on the special magneto thermic switch connected upstream.
- 17° - At the end of the installation, the installer will have to make sure that the parts of the door do not encumber streets or public sidewalks.

THE RIB COMPANY DOES NOT ACCEPT ANY RESPONSIBILITY for possible damages caused by the non observance during the installation of the safety standards and of the laws in force at present.

تنبيه - للسلامة الناس من المهم أن اتبع جميع التعليمات

احفظ بهذه التعليمات مع كبر

- 1° - إذا لم يتم التنبؤ بها في علبة التروس الكهربائية، وتثبيت التبديل من نوع مغناطيسي حراري المنيع، اومني القطبية مع الحد الأدنى من افتتاح اتصالات 3 مم) مع الاختيار المطابقة للمعايير الدولية. هذا الجهاز يجب أن تكون محمية ضد سجن عرضي (على سبيل المثال عن طريق تثبيت لوحة داخل مؤمن).
- 2° - ل قسم ونوع من التصائح لاستخدام الكابلات RIB برفية نوع H05RN-F مع 1.5 sqmm الحد الأدنى و القسم، ومع ذلك، للحفاظ على IEC 364 و معايير التركيب المعمول بها في بلدك.
- 3° - وضعية بضع ممكن من الخلايا الكهروضوئية: ؟ يجب أن يكون نصف قطر الخلايا الكهروضوئية على ارتفاع لا يزيد عن 70 سم من الأرض و على مسافة لا متفوقة على 20 سم من الطائرة الحركة من الباب. يجب التحقق من هذه العمل الصحيح في نهاية التثبيت وفقا لل نقطة D.3.2 من EN 12453
- 4° - للوفاء حدود التي وضعتها EN 12453، وفي حالة القوة الذروة يتجاوز الحد المعياري لل 400 N فمن الضروري أن يكون اللجوء للمسح جود نشط على ارتفاع كاملة من الباب (إلى حد أقصى 2,5 م) - الخلايا الكهروضوئية، في هذه الحالة، يجب أن تطبق وفقا لل نقطة D.4.1 من EN 12453

إلا مع الأدوات.

ملحوظة: إن التأريض من النظام واجبة.

البيانات الموضحة في هذا الكتيب هي محض دليل.

تحتفظ RIB الحق في تغييرها في أي لحظة.

تنفيذ نظام في احترام المعايير والقوانين المعمول بها.

تعليمات السلامة هام لتركيب

تحذير - لا التثبيت الصحيح يمكن أن يسبب أضرار خطيرة

اتبع جميع تعليمات التثبيت

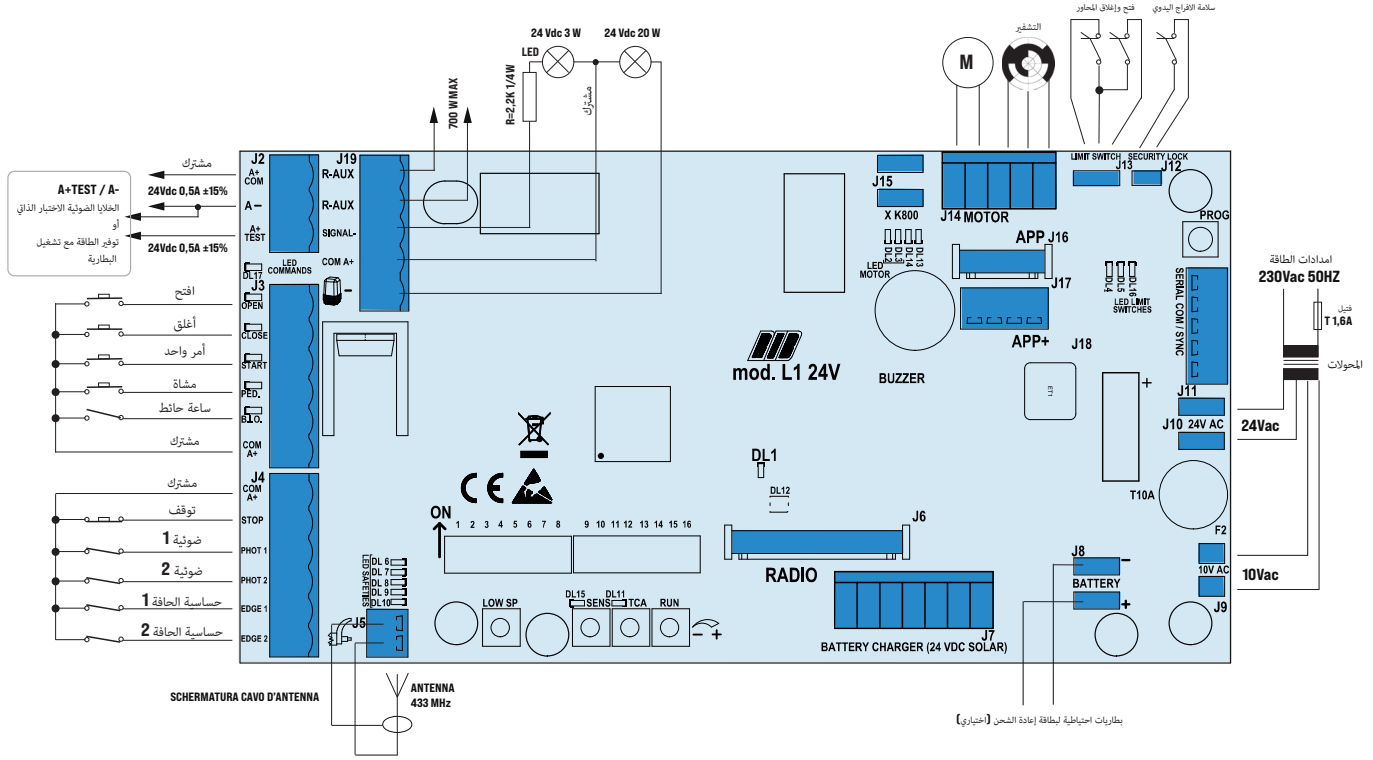
- 1° - يتم تناول هذا الكتيب حصرا ل موظفين متخصصين الذي يعرف معايير البناء و أجهزة الحماية ضد الحوادث للبوواب الآلية، والأبواب و الأبواب الرئيسية (اتباع المعايير و القوانين النافذة).
- 2° - المثبت سوف تضطر إلى إصدار كتيب للمستخدم النهائي وفقا لل 12635.
- 3° - قبل متابعة التثبيت، يجب المثبت توقع تحليل مخاطر إغلاق automatized النهائية وسلامة النقاط الخطيرة التي تم تحديدها (بعد معايير EN 12453).
- 4° - قبل تثبيت المحرك الحركة، و يجب التحقق من أن المثبت بوابة المتداول في ظروف ميكانيكية جيدة، وأنه يفتح ويغلق بشكل كاف.
- 5° - المثبت يجب تثبيت عضو لإطلاق سراح دليل على ارتفاع أقل من 1,8 متر.
- 6° - المثبت سوف تضطر إلى إزالة الحواجز التي قد تعوق الحركة الآلية من بوابة المتداول (مثل مسامير الباب، انزلاق براغي، وأقفال الأبواب وغيرها)
- 7° - المثبت لديها بشكل دائم لوضع التحذير به ضد انحراف في نقطة مرئية جدا أو بالقرب ضوابط ثابتة ممكن.
- 8° - تسخير الأسلاك من مختلف مكونات الكهربائية الخارجية للمشغل (على سبيل المثال الخلايا الكهروضوئية، والبطاريات الخ) يجب أن تنفذ وفقا ل EN 60204-1 و التعديلات عليها القيام به في النقطة 5.2.2 من EN 12453.
- 9° - ويجب أن يتم تجميع ممكن من لوحة المفاتيح لل تحكم يدوي للحركة عن طريق وضع لوحة المفاتيح بحيث أن الشخص تشغيله لا يجد نفسه في موقف خطير؛ علاوة على ذلك، يجب أن تخفض من خطر تفعيل عرضي من الأزرار.
- 10° - الحفاظ على الضوابط تلقائي (لوحة الضغط على زر، تحكم عن بعد وغيرها) للخروج من الطريق الأطفال. يجب وضع الجهاز الأوامر لتشغيل المحرك (مفتاح مغلق يدويا) في المنطقة المرئية من موقع موجهة وبعيدة عن أجزاء متحركة. وينبغي وضعها على الأقل 1,5 م ارتفاع.
- 11° - هذه الأجهزة يمكن استخدامها من قبل الأطفال الذين تتراوح أعمارهم بين 8 سنوات وما فوق و الأشخاص ذوي القدرات المادية والحسية والعقلية انخفاض أو عدم وجود الخبرة والمعرفة إذا ما أعطيت الإشراف أو تعليمات بشأن استخدام الأجهزة بطريقة آمنة وفهم المخاطر الناجمة عنها
- 12° - الأطفال لا يجوز اللعب مع الأجهزة
- 13° - لا يجوز جعل التنظيف والصيانة المستخدم من قبل الأطفال دون إشراف
- 14° - لا تسمح للأطفال باللعب مع ضوابط ثابتة. الحفاظ على أجهزة التحكم عن بعد بعيدا عن متناول الأطفال
- 15° - يجب تثبيت أجهزة القيادة الثابتة بطريقة مرئية أيضا.
- 16° - قبل تنفيذ أي عملية التثبيت، وتنظيم أو صيانة للنظام، و خلج الجهد من خلال العمل على مغناطيسي خاص التبديل الحراري توصيل المنيع.
- 17° - في نهاية التثبيت، سوف المثبت ديك للتأكد من أن أجزاء من الباب لا رهنها الشوارع أو الأرصفة العامة.

شركة RIB لا تقبل أي مسؤولية عن الأضرار المحتملة الناجمة عن عدم مراعاة أثناء تثبيت معايير السلامة

والقوانين المعمول بها في الوقت الحاضر.

تعليمات مبسطة حول K400 مع L1 24V-CRX

1 - توصيل الملحقات



تحكم RUN - منظم السرعة العالية

بالنسبة للبوابات ذات الوزن من 0 + 200 كجم نوصي بتشغيل RUN من 1/2 إلى MAX.
بالنسبة للبوابات التي تزن 200 + 400 كجم، نوصي بتشغيل RUN من MIN إلى 1/2.

انخفاض منظم SP - بطيئة ضبط السرعة في النهج

يتم تنفيذ التعديل لتحديد السرعة المناسبة في نهاية الافتتاح والإقفال في نهاية فقا للهيكل من البوابة أو في وجود احتكاك الضوء الذي يمكن أن يهدد حسن سير النظام.

منظم إغلاق أوتوماتيكي (TCA)

مع هذا الانتهازي، من الممكن ضبط الوقت قبل إقفال أوتوماتيكي أو كلي للمشاة.
ويتم تحقيق الإغلاق التلقائي فقط مع فتح الباب باستخدام مجموع أوامر فتح أو المشاة (الانتهازي استدارة في اتجاه عقارب الساعة لتمكين وظيفة).
يمكن ضبط وقت التوقف المؤقت من 2 ثانية كحد أدنى إلى دقيقتين كحد أقصى.

منظم SENS

مع هذا الانتهازي، من الممكن تعديل رد فعل الصدمة:
مع الانتهازي تحول تماما عكس اتجاه عقارب الساعة وأدى DL15 قبالة، تم تعطيل تأثير الاستشعار.
مع أقل أداة تشذيب، يحدث رد الفعل على التأثير بعد 3 ثوانٍ (حساسية منخفضة)
مع نصف الانتهازي، يحدث رد فعل الصدم بعد 1.5 ثانية (حساسية متوسطة)
مع أداة تشذيب قصوى، يحدث تفاعل الصدم بعد 0.4 ثانية (حساسية عالية)

2: تركيب وضبط كامات الإيقاف

ضع الكامات على أطراف الرف.
اربط المسارين لخلق الكامات



افتح شبك K 400

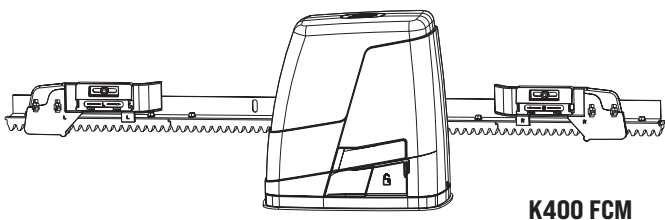
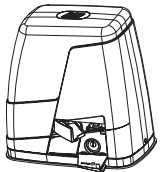
أدخل المفتاح وأدره في اتجاه عقارب الساعة.

اسحب الرفعة لفتح المشغل.

اختر نقطة التدخل الخاصة بالكامات عن طريق تحريك البوابة في اتجاه الفتح والغلق.

ملحوظة: الليد DL5 و DL4 تنطفئ عندما يكتشف الحساس (K400 FCM) الكامات.

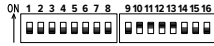
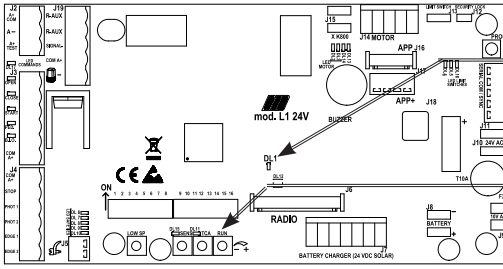
ضع البوابة في منتصف المسار وأعد إغلاق المشغل.



K400 FCM

3: ضبط المسار والسرعة القصوى

أ) ضع المفاتيح 1-2-3-4-5-6-7-8-9-14-15-16 على وضع الإيقاف OFF والمفاتيح 10-11-12-13 على وضع التشغيل ON.



1. افتح المشغل بواسطة الفتح اليدوي وضع كامات القاطع على الرف حتى تتمكن من تحديد مسار البوابة.
2. ضع البوابة في منتصف المسار وأغلق المشغل.
3. ضع مفتاح DIP1 على تشغيل ON => سيبدأ الليد DL1 في الإضاءة.
4. اضغط واستمر بالضغط على زر PROG. (يتم إعطاء الأمر بواسطة الفتح - فتح - إيقاف - غلق - إيقاف - فتح - الخ...) => ستبدأ البوابة بالعمل بسرعة عالية ثم تتخفف السرعة حتى تصل إلى نهاية المسار. تأكد من أن البوابة تقف عند الوضع المطلوب. إن لم يكن كذلك، قم بتحريك كامات نهاية المسار وأعد المحاولة. تأكد أيضاً من أن نهاية المسار في الجهة المقابلة.
5. من الممكن ضبط السرعة العالية أثناء الخمس ثواني الأولى من التشغيل عن طريق العمل على جهاز الضبط RUN. عن طريق لف الجهاز RUN في اتجاه عقارب الساعة، ستزداد السرعة. يتم الضبط الافتراضي لجهاز الضبط RUN على منتصف المسار.

6. في النهاية أعد وضع DIP 1 على وضع الإيقاف OFF. سينطفئ الليد DL1 مما يعطي إشارة الخروج من دائرة التحكم. ملحوظة: أثناء عملية التحكم هذه فإن زر الإيقاف والحواف والخلايا الضوئية لا تكون نشطة.

4: برمجة الفتح الكلي.

1. هـام: من أجل تنفيذ البرمجة الصحيحة يجب وضع البوابة على حوالي 20 سم من قاطع الغلق.

2. ضع DIP 2 على وضع التشغيل ON => سيبدأ الليد DL1 في الإضاءة.

3. اضغط على الزر PROG./RADIO/OPEN/START ستبدأ البوابة سلسلة من التحركات. يمنع المرور أما الخلايا الضوئية أثناء تحرك البوابة. تنتهي البرمجة عندما تظل البوابة مغلقة وينطفئ الليد DL1.

4. أعد وضع DIP 2 على إيقاف OFF.

عند نهاية البرمجة، إذا تم تحريك جهاز RUN، يجب إذن إعادتها.

5: برمجة فتح الممشى

يجب أن تكون البوابة مغلقة بالكامل.

1 - ضبط DIP2 أول على ON (يضيء مصباح DL1 بسرعة) وبعد DIP1 إلى ON (يضيء مصباح DL1 ببطء).

2 - اضغط على زر المشاة (M1 => COM A+/PED.) ويفتح.

3 - اضغط على زر المشاة (COM A+/PED.) لإيقاف M1 عند النقطة المطلوبة.

4 - اضغط على زر المشاة (COM A+/PED.) لإغلاق M1.

5 - عند الوصول إلى الإغلاق، قم بإعادة ضبط DIP 1 و DIP 2 إلى OFF.

6: برمجة جهاز التحكم عن بعد للفتح الكلي

يمكن أن تتم البرمجة فقط عندما تكون البوابة ثابتة.

1- قم بتعيين DIP 1 إلى ON أولاً ثم DIP 2 إلى ON. يومض LED DL12 باللون الأحمر لمدة 10 ثوانٍ.

2 - اضغط على زر التحكم من بعد (عادةً ما تكون القناة A) خلال الثواني العشر المخصصة. إذا تم حفظ جهاز التحكم عن بعد بشكل صحيح يومض LED DL12 باللون الأخضر وتؤكد نغمة الجرس على الحفظ الصحيح. يتم تجديد الثواني العشر من برمجة البرمجة تلقائياً، مع إضاءة LED DL12 باللون الأحمر، من أجل تخزين جهاز الإرسال التالي.

3 - لإنهاء البرمجة، انتظر 10 ثوانٍ، أو اضغط على الزر PROG باختصار. LED DL12 توقف وامض.

4 - إعادة تعيين DIP 1 إلى OFF و DIP 2 إلى OFF.

7: تخصيص الضبط

من الممكن تعديل الضبط من خلال تحريك المفاتيح الكهربائية

DIP 4 الخلايا الضوئية نشطة دائماً (إيقاف) - الخلايا الضوئية النشطة فقط في الختام (ON)

DIP 5 قبل الوميض (ON) - الوميض العادي (OFF)

DIP 6 التحكم في الاندفاعات الأحادية START و RADIO - خطوة بخطوة (ON) - تلقائي (OFF)

DIP 7 ضوئية مراقبة تمكين اختبار (ON - تفعيلها).

DIP 8 متاح

DIP 9 متاح

DIP 10 الكبح التدريجي (ON - تفعيلها)

DIP 11 بداية تدريجية (ON - تفعيلها)

DIP 12 تمكين النظام الراديوي (OFF SUN PRO) - (ON SUN)

DIP 13 سخان (ON - تفعيلها)

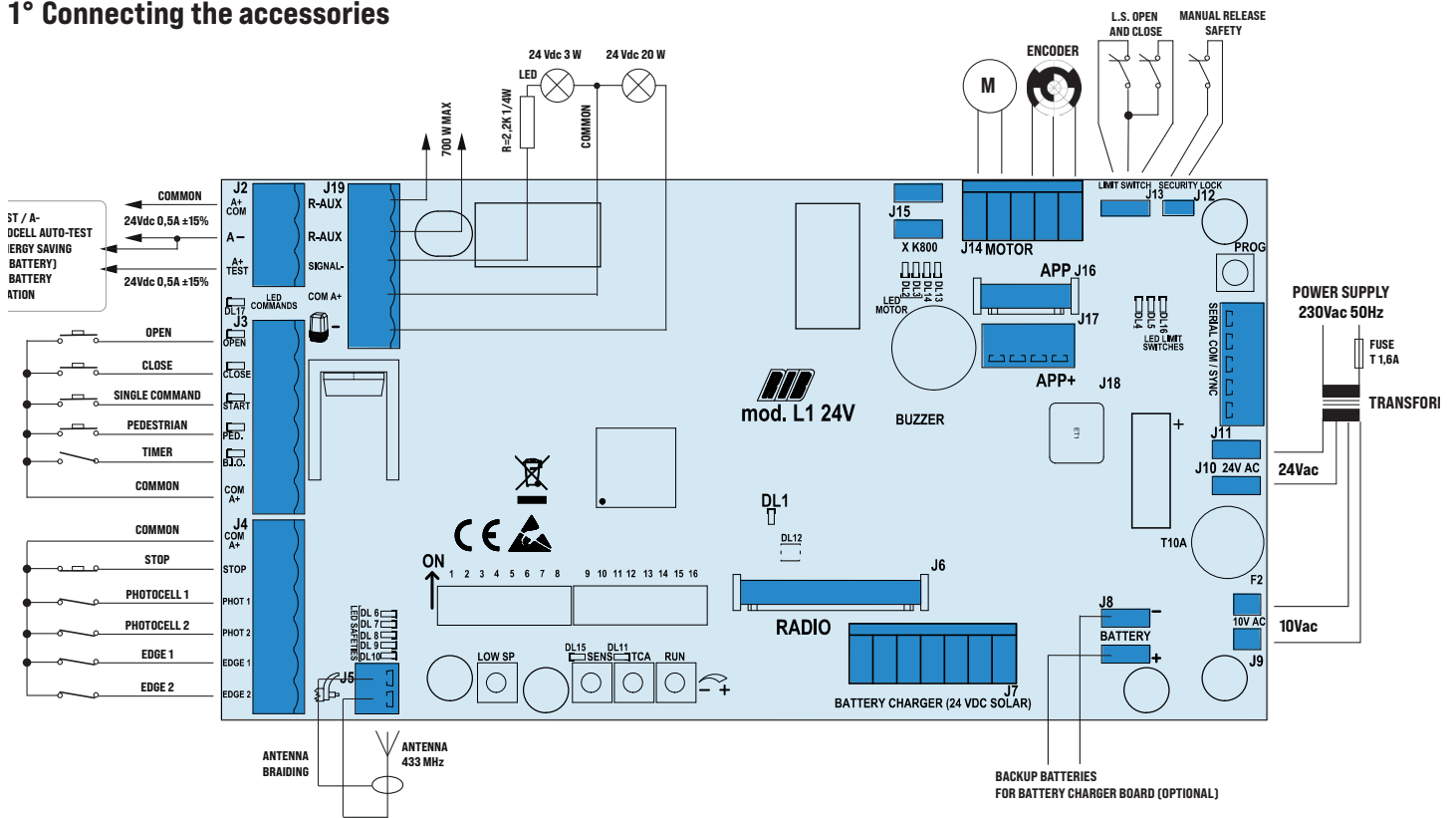
DIP 14 متاح

يجب أن تبقى DIP 15-16 OFF لـ K400

تنبيه: • قم بتثبيت بطاقة APP (أو بطاقة APP+ مع وحداتها) واستخدام هاتفك الذي مع تطبيق RIB GATE App للاستفادة من جميع الوظائف المتقدمة التي يمكن أن يقدمها لك مجلس L1 24V.

SIMPLIFIED INSTRUCTIONS FOR K400 WITH L1 24V-CRX

1° Connecting the accessories



RUN TRIMMER - high-speed regulator

For gates weighing from 0 to 200 kg is recommended to set the RUN trimmer from 1/2 to MAX.
For gates weighing from 200 to 400 kg is recommended to set the RUN trimmer from MIN to 1/2.

LOW SP TRIMMER - slow speed approach regulator

Adjustment is performed to determine the correct speed at the end of opening and closing according to the gate or when there is friction that might cause the system to function poorly.

TCA TRIMMER - AUTOMATIC CLOSING pause time regulator for TOTAL or PEDESTRIAN openings

This trimmer makes it possible to adjust the pause time for total or pedestrian automatic closing. Only with gate completely open (total) or partially open (pedestrian) and LED DL1 ON (trimmer rotated clockwise to activate the feature).

The pause time (for a totally opened gate) can be adjusted from a minimum of 2 s up to a maximum of 2 minutes.

TRIMMER SENS - impact sensor regulator

With this trimmer it is possible to adjust the impact reaction:

- with trimmer turned fully counter-clockwise and DL15 OFF, impact sensor deactivated.
- with trimmer at minimum, the impact reaction occurs after 3 s (low sensitivity)
- with trimmer at halfway, the impact reaction occurs after 1,5 s (medium sensitivity)
- with trimmer at max, the impact reaction occurs after 0,4 s (high sensitivity)

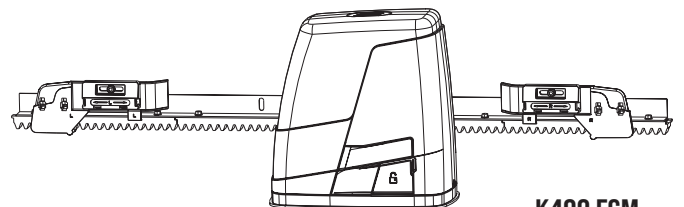
2° Installing and adjusting the limit switch cams



Position the cams at the ends of the rack rail.
Tighten the two screws to secure them in place.



Open the shutter door of the K400.
Insert the key and turn in a clockwise direction.
Pull the lever to unlock the operating system.
Check the cam intervention point by opening and closing the gate.
N.B.: The DL4 and DL5 LEDs switch OFF when the cams are detected by the proximity sensor (K400 FCM).
Position the gate halfway and re-secure the operating system.



K400 FCM

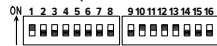
3. ADJUSTING RUN AND MAXIMUM SPEED

a) Set micro-switches **DIP 1-2-3-4-5-6-7-8-9-14-15-16 to OFF** and **DIP 10-11-12-13 to ON**.



1 - Unlock the operating system using the manual security release and position the limit switch cams on the rack rail in order to define the run of the gate.

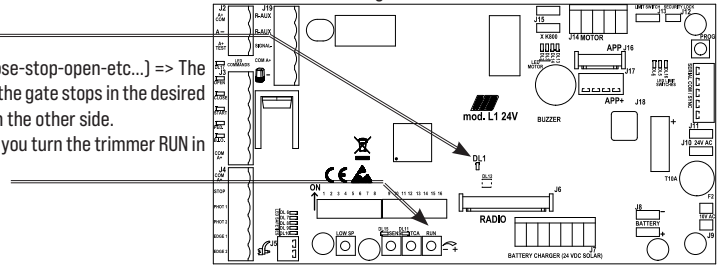
2 - Move the gate halfway along and lock the operator.



3 - **Set DIP 1 to ON** => the DL1 LED will begin to flash.

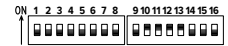
4 - Press and hold down the PROG button (controlled through a dead man's switch, open-stop-close-stop-open-etc...) => The gate starts at high speed, before slowing down until it reaches the limit switch. Make sure that the gate stops in the desired position. If it does not, move the limit switch cams and try again. Also check the limit switch on the other side.

5 - You can adjust the high speed during the first 5 s of operation, by operating the trimmer RUN. If you turn the trimmer RUN in a clockwise direction, the speed increases. The default setting of the trimmer RUN is halfway.



6 - On completion, **put DIP 1 back to the OFF position**. The DL1 LED will switch OFF, signalling the exit from the control.

N.B.: During this check, the stop button, the ribs and the photocells are not active.



4. - PROGRAMMING TOTAL OPENING.

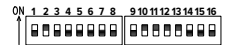
1 - IMPORTANT: POSITION THE GATE AT APPROXIMATELY 20 CM FROM THE CLOSING LIMIT SWITCH TO PROGRAMME PROPERLY.

2 - Put the **DIP 2 in the ON position** => the DL1 LED begins to flash.

3 - Press the PROG./RADIO/OPEN/START button. The gate will begin a series of movements. **DO NOT WALK IN FRONT OF THE PHOTOCELLS WHEN THE GATE IS MOVING.** Set up is complete when the gate remains closed and the DL1 LED is OFF.

4 - Turn the **DIP 2 back to the OFF position**.

N.B.: If you move the trimmer RUN on completion of programming, then you will have to repeat it.



5° - PROGRAMMING THE PEDESTRIAN GATEWAY OPENING

With the gate closed:

1 - First set **DIP 2 to ON** (DL1 led flashes quickly) and after DIP1 to ON (DL1 led flashes slowly).

2 - Press the pedestrian button (COM A+/PED.) => M1 opens.

3 - Press the pedestrian button (COM A+/PED.) To stop M1 at the desired point.

4 - Press the pedestrian button (COM A+/PED.) To close M1.

5 - When the closure is reached, reset **DIP 1 and DIP 2 to OFF**.



6 PROGRAMMING THE REMOTE CONTROL FOR TOTAL OPENING

Programming can be done only when the gate is stationary.

1 - First set **DIP 1 to ON** and then **DIP 2 to ON**. The LED DL12 flashes red for 10 s.

2 - Press the remote button (usually channel A) within the allotted 10 s. If the remote is memorized properly LED DL12 blinks green and a buzzer tone confirms the correct memorization. The 10 s for programming the codes are automatically renewed, with LED DL12 which flashes red, in order to store the next transmitter.

3 - To finish programming, wait 10 s, or press the PROG button briefly. LED DL12 stops flashing.

4 - Re-set **DIP 1 to OFF** and **DIP 2 to OFF**.



7 Customising configuration

You can change the configuration by moving the various micro-switches

DIP 4 Photocells always active (OFF) - Photocells active only during closing (ON)

DIP 5 Pre-blinking (ON) - Normal blinking (OFF)

DIP 6 Single pulse command (START) and RADIO - step-by-step (ON) - automatic (OFF)

DIP 7 Photocells AUTO-TEST activation (ON-activated).

DIP 8 Available

DIP 9 Available

DIP 10 Gradual brake (ON-activated)

DIP 11 Gradual start (ON - activated)

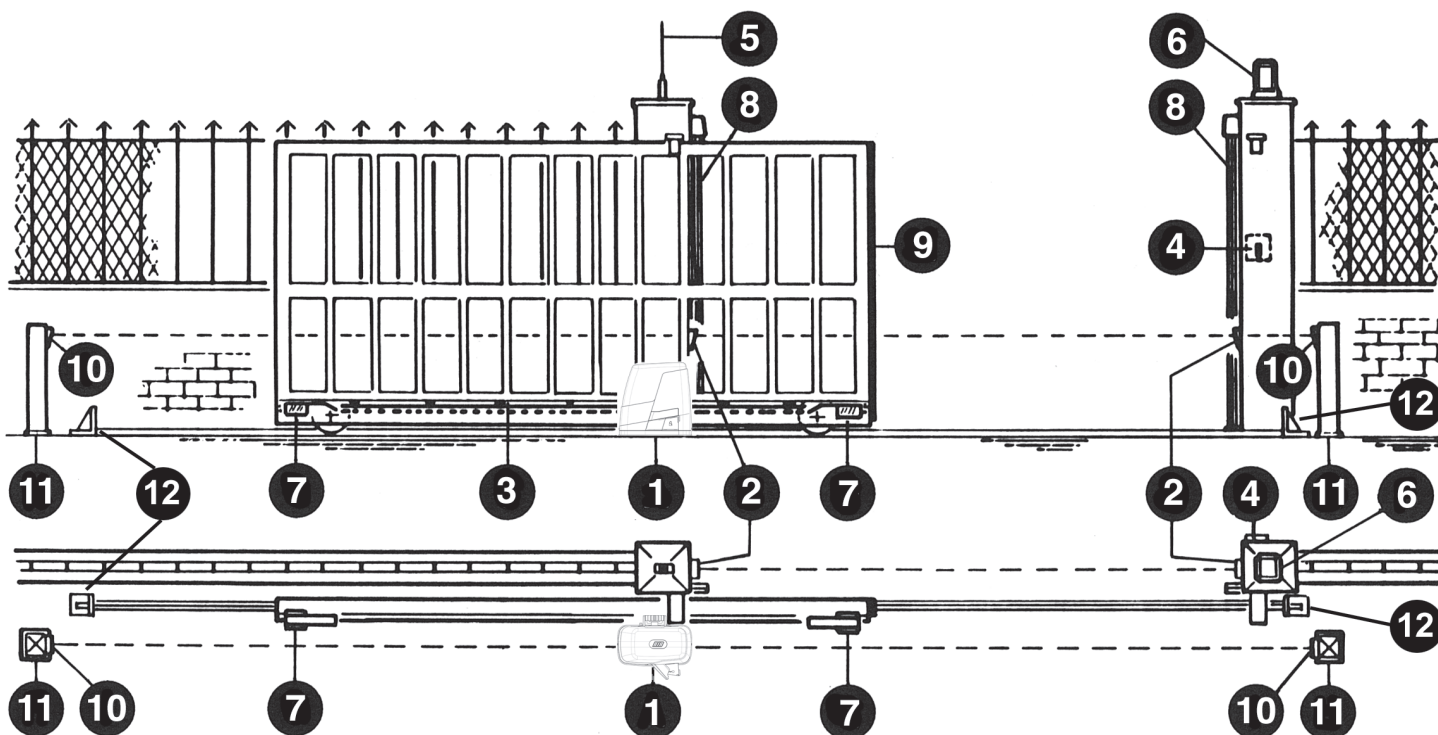
DIP 12 Activate the radio system SUN (ON) - SUN PRO (OFF)

DIP 13 Heater (ON - activated)

DIP 14 Available

DIP 15-16 must remain OFF for K400

ATTENTION: Install the APP card (or the APP+ card with its modules) and use your smartphone with the RIB GATE App to take advantage of all the advanced features that the L1 24V control board can offer you.

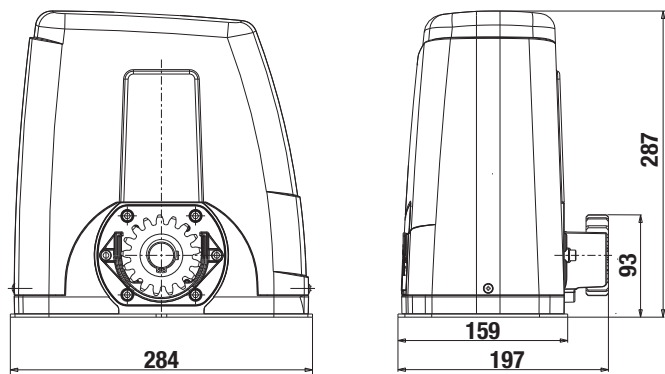


- 1 - K400 operating device
- 2 - External photocells
- 3 - Rack of Module 4
- 4 - Key selector
- 5 - Radio antenna
- 6 - Blinker
- 7 - Limit switch plate (cams)
- 8 - Mechanical strip
- 9 - Mechanical strip
- 10 - Internal Photocells
- 11 - Photocell columns
- 12 - Mechanical stops

TECHNICAL FEATURES

Irreversible operating devices for sliding gates with a maximum weight of 400 kg / 881 lbs.

The irreversibility of this operating device allows you to avoid using any electric lock for an effective closing of the gate.



Measurements in mm/inch

TECHNICAL DATA		K400	
Max. leaf weight	kg	400	
Operating speed	m/s	0,15÷0,33	
Thrust force	N	434	
Torque	Nm	14,7	
Rack module	M	4	
Power supply		230 V~ 50/60 Hz	120 V~ 60 Hz
Capacity	W	96,6	100,8
Power absorbed with load	A	0,42	0,84
Motor power supply		24 Vdc	
Normative cycles	n°	∞ - 30s/2s	
Daily operations suggested	n°	78	
Service	%	100	
Guaranteed consecutive cycles	n°	40/5m	
Grease		COMLUBE LHITGREASE EP/GR.2	
Weight of electroreducer	kg	9,8	
Noise	db	<70	
Working temperature	°C	-10 ÷ +55	
Protection	IP	44	

CHECKING BEFORE THE INSTALLATION

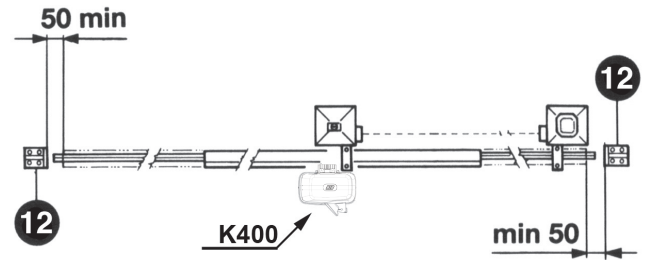
!! THE GATE SHALL MOVE FRICTIONLESS !!

N.B.: Gate features must be uniformed with the standards and laws in force. The door/gate can be automated only if it is in a good condition and its conditions comply with the EN 12604 norm.

- The door/gate leaf does not have a pedestrian door. In the opposite case it is necessary to take the appropriate steps, in accordance with EN 12453 point 6.5.1 (for instance; by preventing the operation of the motor when the pedestrian door is opened, by installing a safety microswitch connected with the control panel).
- Besides the electrical or mechanical limit switches available on the operators, there must be, on both ends of the installation, a fixed mechanical stopper which stop the gate in the unlikely event of ill functioning of limit switches on the operators. For this reason the fixed mechanical stopper must be of an adequate size to withstand the static and kinetic forces generated by the gate [12] (fig. 2).
- Gate columns shall have anti-derailment guides on their top (fig. 3), to avoid the unintentional gate release.

N.B.: Remove mechanical stops like the one in fig. 3.

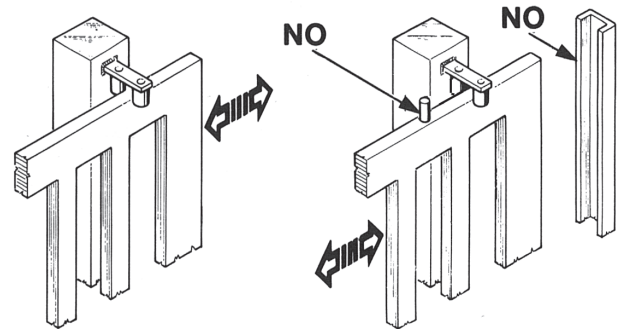
No mechanical stops shall be on top of the gate, since these mechanical stops are not safe enough.



2

Parts to install according to EN 12453 standard			
COMMAND TYPE	USE OF THE SHUTTER		
	Skilled persons (out of public area*)	Skilled persons (public area)	Not skilled persons
Hold-to-run operation	A	B	Not possible
Impulsive - in sight (e.g. push-button)	C or E	C or E	C and D, or E
impulsive - out of sight (e.g. remote)	C or E	C and D, or E	C and D, or E
automatic	C and D, or E	C and D, or E	C and D, or E

* a typical example are those doors which do not have access to any public way
 A: Hold-to-run operation made by push-button ex: code ACG2013
 B: Hold-to-run operation made by key selector ex: code ACG1010
 C: Adjustable power of the motor or photocells to respect impact forces as indicated in Annex A
 D: Safety strips and/or other additional devices to reduce the probability of contact with the door.
 E: Devices installed in such a way that a person can not be touched by the door.



3

RELEASE

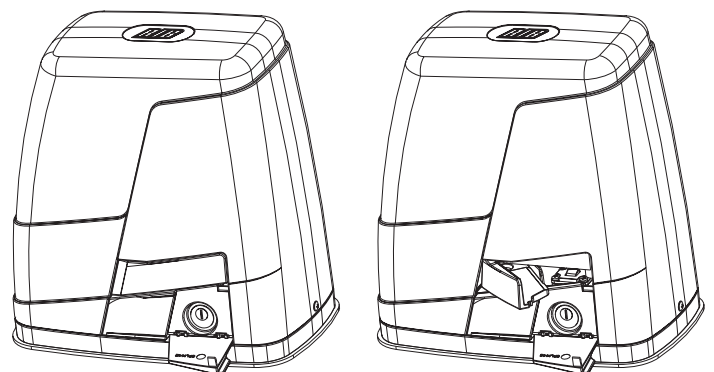
To operated after the power supply to the motor has been interrupted.

In order to operate the gate manually, simply open the door, insert the key, turn it clockwise and pull the lever (Fig. 4).

In order to carry out the manual operation of the gate leaf the followings must be checked:

- That the gate is endowed with appropriate handles;
- That these appropriate handles are placed so to avoid safety risks for the operator;
- That the physical effort necessary to move the gate leaf should not be higher than 225 N, for doors/gates for private dwellings, and, 390 N for doors/gates for commercial and industrial sites (values indicated in 5.4.5 of the EN 12453 norm).

To re-lock the motor, turn the key counter-clockwise and press the lever in place.



4

MOTOR AND RACK FITTING

Operator K400 comes with a base plate for vertical adjustment. Such adjustment proves to be useful to set a 1mm clearance between the drive gear and the rack. Insert the two 4MA self-locking nuts which are needed to fix the cover of the K400 operator before securing the operator to its base plate using the nuts and flat washers 8MA 8x26 provided (see Pict. 5).

The base plate features two hooks that can be used to secure the system on the ground (Fig. 6).

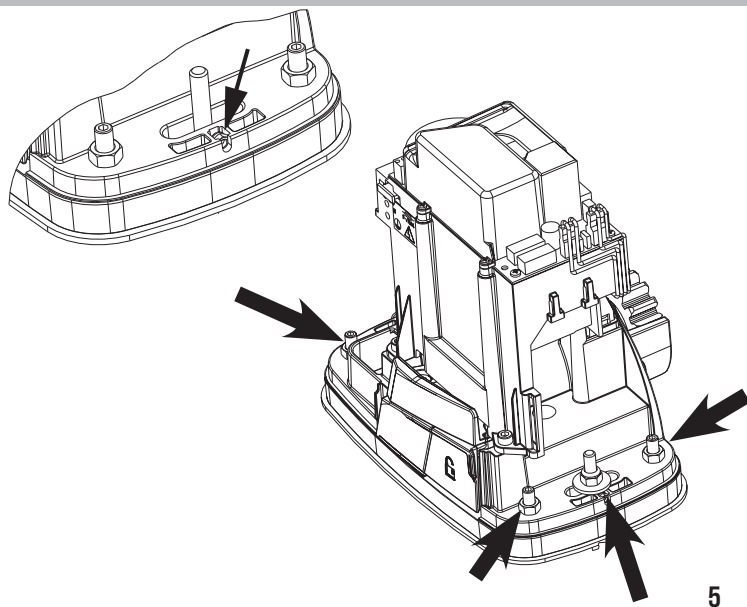
The rack shall be fitted over the motor support, at a certain distance from it. Its height can be adjusted thanks to the holes in the rack.

The towing gear must have at least 1 mm of backlash compared to the rack (Fig. 7).

The height is adjusted to prevent the gate from resting on the driving gear of the K as it moves.

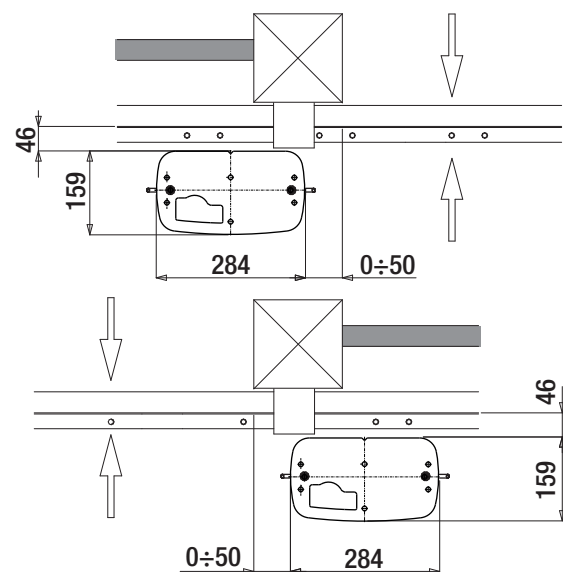
To fix the rack on the gate, drill some Ø 5 mm holes and thread them using an M6 screw tap.

The driving gear needs some 1 mm clearance from the rack.



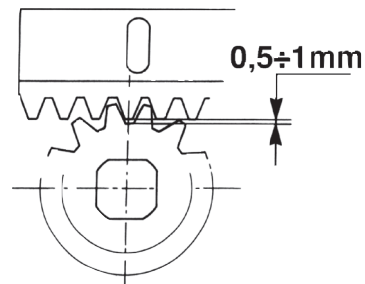
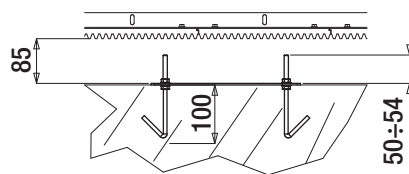
Measurements in mm

5



Measurements in mm

6



Measurements in mm

7

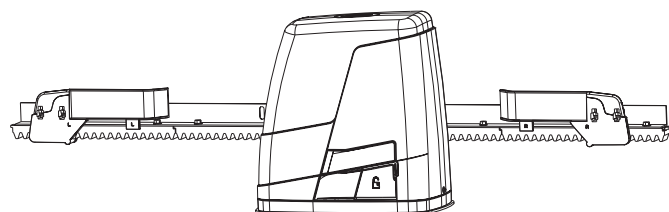
LIMIT SWITCH FITTING

In order to determine the travel of the moving part, place two cams at the ends of the rack (Fig. 8, 9).

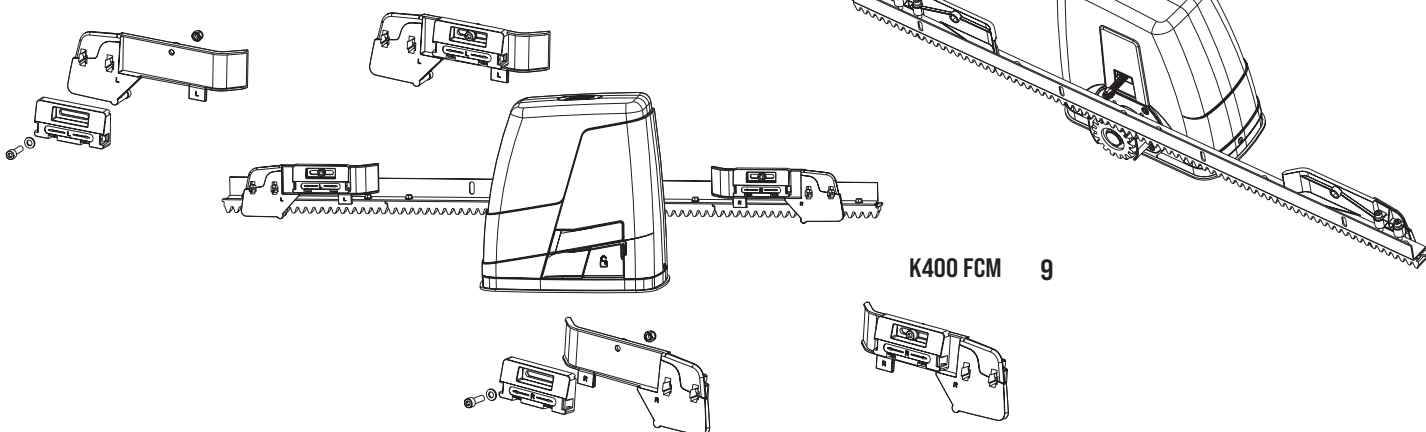
Move the cams on the rack teeth to adjust their opening and closing travel.

To fix the cams to the rack, tighten the screws issued.

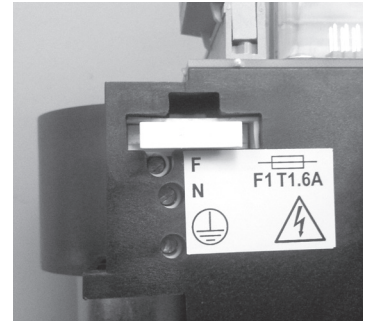
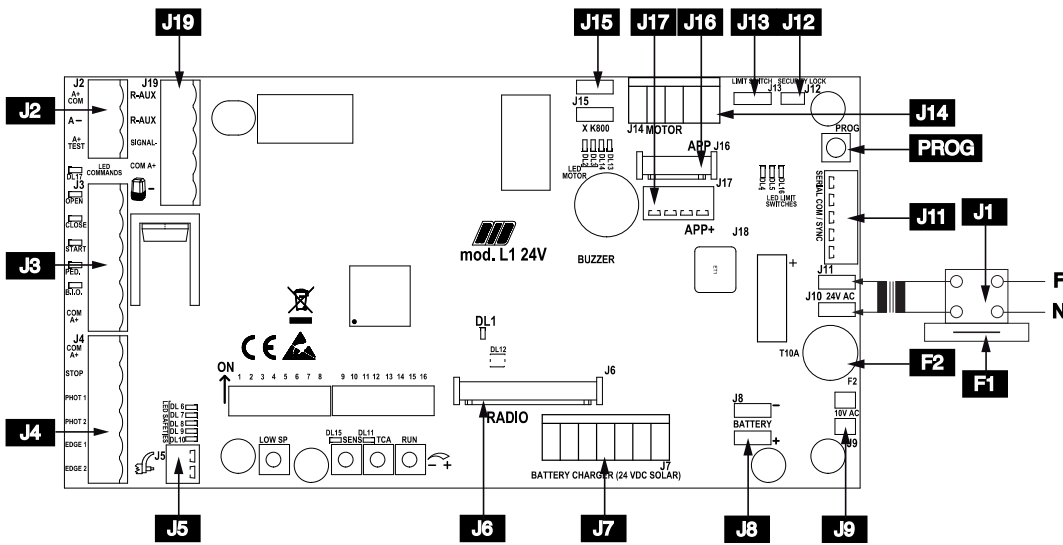
N.B: In addition to the electric stop cams mentioned above, you must also install strong mechanical stops preventing the gate from sliding out of the top guides.



K400 FCE 8



K400 FCM 9



F > PHASE
N > NEUTRAL
⏏ > EARTH

J1	N F	Power supply 230 Vac 50/60 Hz - external to the control panel - (120 V 60 Hz upon request)	J9	10VAC	Connectors for secondary 10 Vac transformer
J2	A+COM	+ 24Vdc accessories power supply	J10	24VAC	Connectors for secondary 24 Vac transformer
	A-	- 24Vdc accessories power supply	J11	SERIAL COM / SYNC	Connector for serial connection
	A+TEST	+ 24Vdc Photocells self-test power supply	J12	SECURITY LOCK	Connector for manual release switch
J3	OPEN	Open pulse contact (NO)	J13	LIMIT SWITCH	Connector for electrical or magnetic limit switches
	CLOSE	Close pulse contact (NO)	J14	MOTOR	Connector for 24 Vdc motor and 5 Vdc encoder
	START	Single pulse contact (NO)	J15	X K800	Connectors for motor K800 connection (do not use)
	PED.	Pedestrian opening pulse contact (NO)	J16	APP	Connector for APP Card
	B.I.O.	Clock contact (NO)	J17	APP+	Connector for APP+ Card
	COM A+	Contacts common / Positive 24 Vdc	J18		RS485 termination of J17
	J4	COM A+	Contacts common / Positive 24 Vdc	J19	R-AUX
STOP	Stop pulse contact (nc)	SIGNAL -	Open gate indicator 24 Vdc max 3 W		
PHOT 1	Photocells 1 contact (nc)	COM A+	Contacts common / Positive 24 Vdc		
PHOT 2	Photocells 2 contact (nc)	⏏-	Negative flasher 24 Vdc 20 W (code ACG7072)		
EDGE 1	Edge 1 contact (nc)	SENS	Trimmer for adjusting sensitivity to impact against an obstacle		
EDGE 2	Edge 2 contact (nc)	TCA	Trimmer for automatic closing time adjustment (DISABLED BY FACTORY AND DL11 LED OFF)		
J5	Radio Antenna 433MHz	RUN	Trimmer for high speed adjustment operations		
J6	RADIO	LOW SP	Trimmer for low speed adjustment operations		
J7	BATTERY CHARGER (24V DC SOLAR)	PROG	Programming key		
J8	BATTERY +/-	F1	T 1,6 A	Transformer protection fuse (external to the card L1 24V)	
		F2	T 10 A	Motor protection fuse	

B - SETTINGS

- DIP 1 ADJUST STROKE IN LINE WITH ELECTRICAL OR MAGNETIC LIMIT SWITCHES (POINT C)
- DIP 2 PROGRAMME FULL OPENING (POINT D)
- DIP 2-1 PROGRAMME PEDESTRIAN OPENING TIMES (POINT E)
- DIP 1-2 SAVE/DELETE RADIO CODES FOR FULL OPENING CONTROL (POINT F)
- DIP 1-3 SAVE/DELETE RADIO CODES FOR PEDESTRIAN OPENING CONTROL (POINT G)
- DIP 1-2-3 SAVE/DELETE RADIO CODES FOR RELAY R-AUX COMMAND (POINT H)
- DIP 3 (ON) - REMOTE PROGRAMMING OF REMOTE CONTROLS DEACTIVATED
- DIP SWITCHES CONTROL
- DIP 4 Photocells always active (OFF) - Photocells active only during closing (ON)
- DIP 5 Pre-blinking (ON) - Normal blinking (OFF)
- DIP 6 Single pulse command (START) and RADIO - step-by-step (ON) - automatic (OFF)
- DIP 7 Photocells AUTO-TEST activation (ON-activated).
- DIP 8 Available
- DIP 9 Available
- DIP 10 Gradual brake (ON-activated)
- DIP 11 Gradual start (ON - activated)
- DIP 12 Activate the radio system SUN (ON) - SUN-PRO (OFF)

- DIP 13 Heater (ON - activated)
- DIP 14 Available

DIP 15	DIP 16	
OFF	OFF	K400

ADJUSTMENTS

RUN TRIMMER - high-speed regulator

With this trimmer it is possible to adjust the motor speed (set as standard to the max speed). The adjustment is quite useful to align the automation with the European standards on impacts. For gates weighing from 0 to 200 kg is recommended to set the RUN trimmer from 1/2 to MAX. For gates weighing from 200 to 400 kg is recommended to set the RUN trimmer from MIN to 1/2.

LOW SP TRIMMER - slow speed approach regulator

The slow speed control is performed by adjusting the LOW SP trimmer which changes the voltage output across the motor(s) [turning it clockwise increases the speed].

Adjustment is performed to determine the correct speed at the end of opening and closing according to the gate or when there is friction that might cause the system to function poorly.

TCA TRIMMER - AUTOMATIC CLOSING pause time regulator for TOTAL or PEDESTRIAN openings by factory NOT ACTIVATED and LED DL11 OFF (trimmer fully rotated counterclockwise)

This trimmer makes it possible to adjust the pause time for total or pedestrian automatic closing. Only with gate completely open (total) or partially open (pedestrian) and LED DL11 ON (trimmer rotated clockwise to activate the feature).

The pause time (for a totally opened gate) can be adjusted from a minimum of 2 s up to a maximum of 2 minutes.

The pause time (for gate open with PED. control) can be adjusted from a minimum of 2 s to a maximum of 30 s.

Ex: With TCA trimmer setted halfway, you will have 1 minute pause after the total opening and 15 s of pause after the pedestrian opening prior to have the auto-close of the gate.

TRIMMER SENS - impact sensor regulator

By factory enabled and DL15 ON (trimmer halfway)

The L1 24V control board is equipped with an impact sensor that reverses the gate's travel if it impacts on things or people (in compliance with the EN standards in force - always check with a suitable instrument to comply with the values set by the EN12453 standard.

With impact in opening, it reverses the closing movement for 1 s and then stops.

With impact on closing, it reverses the opening movement for 1 s and then stops.

With this trimmer it is possible to adjust the impact reaction:

- with trimmer turned fully counter-clockwise and DL15 OFF, impact sensor deactivated.

- with trimmer at minimum, the impact reaction occurs after 3 s (low sensitivity)

- with trimmer at halfway, the impact reaction occurs after 1.5 s (medium sensitivity)

- with trimmer at max, the impact reaction occurs after 0,4 s (high sensitivity)

The movement will restart at a slow speed until the opening or closing limit switch is reached.

IMPACT SENSOR ALARM

The alarm status will be displayed by the flasher which will remain active for one minute and the buzzer with 3 tones every 5 s. During this time, the gate can be reset by pressing any control button.

R-AUX - AUXILIARY RELAY CONTACT (NO)

Normally this relay is set as courtesy light (max 700 W - 3 A - 230 Vac) to operate 3 minutes at each command, with time renewed at each command.

You can activate the R-AUX contact by TRANSMITTER by performing the memorization procedure described in point H and the RIB GATE App.

GRADUAL BRAKING

DIP 10 ON => Brake activated. With the RIB GATE app it is possible to regulate braking making it gradual.

GRADUAL START

DIP 11 ON => gradual motion is enabled for 0,5 second with every start.

LED SIGNALS

DL1	programming signal enabled	(red)
DL2	opening gate signal	(green)
DL3	closing gate signal	(red)
DL4	opening limit switch signal	(green)
DL5	closing limit switch signal	(red)
DL6	STOP contact signal	(red)
DL7	photocell PHOTO 1 contact signal	(red)
DL8	photocell PHOTO 2 contact signal	(red)
DL9	EDGE 1 contact signal	(red)
DL10	EDGE 2 contact signal	(red)
DL11	TCA - automatic closure time enabled	(red)
DL12	Remotes programming enabled	(red/green)
DL13	Card managed by APP	(blu)
DL14	encoder status signal	(red)
DL15	SENS - impact sensor enabled	(red)
DL16	manual unlock micro-switch signal	(red)
DL17	PROG commands	(green)
OPEN	OPEN command (NO)	(green)
CLOSE	CLOSE command (NO)	(green)
START	Single impulse command (NO)	(green)
PED.	Pedestrian command (NO)	(green)
B.I.O	Clock command (NO)	(green)

C – LIMIT SWITCH CAMS and SPEEDS ADJUSTMENTS

This control has the task of facilitating system commissioning or any subsequent adjustments for the installer.

N.B. : During this control the safety functions Safety edge, Photocells, Stop button and Impact sensor are NOT active.

1 - Unlock the operator using the manual release and position the limit switch cams on the rack, so as to define the gate stroke.

2 - Bring the gate to mid-stroke position and lock the operator.

3 - Set DIP 1 to ON mode => led DL1 starts flashing.

4 - Press and hold the PROG button (the command is operator-run, open-stop-close-stop-open-etc...) => the gate starts at high speed and then slows down until it reaches the limit stop. Check that the gate stops in the desired position. If not, move the limit switch cams and try again. Check the limit switch on the opposite side.

5 - You can adjust the high speed during the first 5 s of operation by rotating the RUN trimmer. Rotating the RUN trimmer clockwise, the speed increases. The RUN trimmer is normally set to max.

6 - It is possible to adjust the slow speed after the first 5 s from the start and for the rest of the run by operating on the LOW SP trimmer. Turning the LOW SP trimmer clockwise increases the speed. The LOW SP trimmer is factory set at half stroke.

7 - When done, reset DIP 1 to OFF. Led DL1 goes OFF signalling exit from the control.

IMPORTANT: During this operation, the stop button, edges and photocells are not enabled.

D – FULL OPENING PROGRAMMING

NB. : During the programming phase, the safety functions Safety edge, Photocells, Stop button and Impact sensor are active and their performance level is PL "b" according to EN13849-1. Their intervention stops the programming (led DL1 shifts from flashing to on steady).

Caution: If the inputs STOP, PHOT 1, PHOT 2, EDGE 1 and EDGE 2 are not connected, run jumpers between COM A+/STOP/PHOT 1/PHOT 2/EDGE 1/EDGE 2 before you proceed with programming.

N.B. : In this case, the safety functions Safety edge, Photocells, Stop button are NOT active.

1 - IMPORTANT: TO PROPERLY PROGRAMME THE OPENING, YOU MUST POSITION THE GATE AT ABOUT 20 CM FROM THE CLOSING LIMIT-SWITCH.

2 - Set DIP 2 to ON mode => led DL1 starts flashing.

3 - Press the PROG button or the remote control button (if previously memorized) dedicated to the total opening. The gate will begin a series of movements. **DO NOT PASS IN FRONT OF THE PHOTOCELLS WHILE THE GATE IS MOVING.**

4 - The programming stops when the gate is closed and led DL1 is OFF.

5 - Set DIP 2 to OFF.

Note well: If at the end of the programming procedure the trimmer RUN is moved, the programming procedure must be repeated.

Note: the low speed starting point is calculated automatically by the control unit during the time programming procedure. It will start 50 ÷ 60 cm before reaching the opening or closing limit stop.

To repeat the programming procedure, position the DIP 2 in the OFF mode, and by using the procedure "C - Adjust stroke in line with electrical or magnetic limit switches" close the gate almost completely, leaving it open for 20 cm. Then, repeat the programming procedure as described above.

E – PEDESTRIAN OPENING PROGRAMMING

NB. : During the programming phase, the safety functions Safety edge, Photocells, Stop button and Impact sensor are active and their performance level is PL "b" according to EN13849-1. Their intervention stops the programming (led DL1 shifts from flashing to on steady).

When the gate is closed:

1 - First, set DIP 2 to ON and then DIP 1 to ON. Led DL1 starts flashing.

2 - Press the pedestrian button (COM A+/PED.) or the remote control button (if previously memorized) dedicated to the pedestrian opening => The gate opens.

3 - Press the pedestrian button to stop the gate (the pedestrian opening stroke of the gate is now set). After 2 s the gate will automatically close..

4 - When done programming the pedestrian opening, set DIP 1 and DIP 2 to OFF.

To repeat the programming procedure, position DIP 1 and DIP 2 to OFF and by using the procedure "C - Adjust stroke in line with electrical or magnetic limit switches" close the gate completely. Then, repeat the programming procedure as described above.

F - RADIO CODES PROGRAMMING PROCEDURE FOR TOTAL OPENING (1000 CODES MAX) - with radio module AC68069

ATTENTION: before storing the radio codes, use DIP 12 to select which transmitters to use:

DIP 12 OFF: SUN-PRO variable code transmitters can be memorized:

SUN-PRO 2CH 2-channel - red keys and white led cod. AC66210

SUN-PRO 4CH 4-channel - red keys and white led cod. ACG6214

DIP 12 ON (by factory): You can store transmitters with fixed code SUN:

SUN 2CH 2-channel - blue keys and white led cod. ACG6052

SUN 4CH 4-channel - blue keys and white led cod. ACG6054

SUN CLONE 2CH 2-channel - blue keys and yellow led cod. ACG6056

SUN CLONE 4CH 4-channel - blue keys and yellow led cod. ACG6058

ATTENTION: it is not possible to memorize at the same time transmitters with fixed code and transmitters with variable code.

Programming can be done only when the gate is stationary.

1 - First set **DIP 1 to ON** and then **DIP 2 to ON**. The LED DL12 flashes red for 10 s.

2 - Press the transmitter button (usually channel A) within the allotted 10 s. If the remote is memorized properly LED DL12 blinks green and a buzzer tone confirms the correct memorization. The 10 s for programming the codes are automatically renewed, with LED DL12 which flashes red, in order to store the next transmitter.

3 - To finish programming, wait 10 s, or press the PROG button briefly. LED DL12 stops flashing.

4 - Re-set **DIP 1 to OFF** and **DIP 2 to OFF**.

REMOTE PROGRAMMING NEW REMOTE CONTROLS DEDICATED TO TOTAL OPENING

1 - Press the button on the valid remote control dedicated to fully opening the gate 3 times in rapid succession. The buzzer will sound once for 1 second and the flasher will flash for 4 seconds to signal the activation of the procedure.

2 - Immediately then press the same button once on the new remote control(s) you want to register. The buzzer will sound 1 time to confirm the registration of each new remote control. Wait 4 seconds for the procedure to exit. The flasher will turn off.

If you do not want to use this function, set DIP 3 to ON to deactivate it.

ALL RADIO CODES FOR TOTAL OPENING CANCELLATION PROCEDURE

Cancellations can only be performed when gate is stationary.

1 - Set **DIP 1 to ON** and then **DIP 2 to ON**.

2 - LED DL12 flashes red for 10 s.

3 - Press and hold the PROG button for 5 s. Memory cancellation is indicated by two green flashes of LED DL12 and 2 tones of the buzzer.

4 - LED DL12 flashes red again for 10 seconds and you can add new codes as shown above.

5 - Re-set **DIP 1 to OFF** and **DIP 2 to OFF**.

RADIO CODES MEMORY FULL INDICATOR (FOR TOTAL OPENING)

Indication is visible only when gate is stationary.

1 - Set **DIP 1 to ON** and then **DIP 2 to ON**.

2 - The LED DL12 flashes green 6 times when the memory is full (1000 codes). Now LED DL12 blinks red for 10 s enabling possible cancellation of all codes.

3 - Re-set **DIP 1 to OFF** and **DIP 2 to OFF**.

G - RADIO CODES PROGRAMMING PROCEDURE FOR PEDESTRIAN OPENING

(1000 CODES MAX) - with radio module ACG8069

Programming can be done only when the gate is stationary.

1 - Set **DIP 1 to ON** and then **DIP 3 to ON**. DL12 flashes green for 10 s.

2 - Press the transmitter button (usually channel B) within the allotted 10 s. If the transmitter is properly memorized LED DL12 blinks red and the buzzer emits a tone. The 10 s are automatically renewed (DL12 flashes green) in order to memorize next transmitter.

3 - To finish programming wait 10 s, or press the PROG button briefly. The LED DL12 stops flashing.

4 - Reset **DIP 1 to OFF** and **DIP 3 to OFF**.

REMOTE PROGRAMMING NEW REMOTE CONTROLS DEDICATED TO PEDESTRIAN OPENING

1 - Press the button on the valid remote control dedicated to pedestrian opening of the gate 3 times in rapid succession. The buzzer will sound 2 times for 1 second and the flasher will flash for 4 seconds to signal the activation of the procedure.

2 - Immediately then press the same button once on the new remote control(s) you want to register. The buzzer will sound 1 time to confirm the registration of each new remote control. Wait 4 seconds for the procedure to exit. The flasher will turn off.

If you do not want to use this function, set DIP 3 to ON to deactivate it.

ALL RADIO CODES FOR PEDESTRIAN OPENING CANCELLATION PROCEDURE

Cancellation can only be performed when the gate is stationary.

1 - Set **DIP 1 to ON** and then **DIP 3 to ON**. LED DL12 flashes green for 10 s.

2 - Press and hold the PROG button for 5 s. Memory cancellation is indicated by two red flashes of LED DL12 and two tones of the buzzer.

3 - The red LED DL1 remains active and you can add new codes as shown above.

4 - Reset **DIP 1 to OFF** and **DIP 3 to OFF**.

RADIO CODES MEMORY FULL INDICATOR (FOR PEDESTRIAN OPENING)

Indication is visible only when gate is stationary.

1 - Set **DIP 1 to ON** and then **DIP 3 to ON**.

2 - LED DL12 flashes green 6 times if the memory is full (1000 codes). LED DL12 blinks red for 10 s enabling possible cancellation of codes.

3 - Set **DIP 1 to OFF** and **DIP 3 to OFF**.

H - PROGRAMMING RADIO CODES FOR R-AUX RELAY (1000 CODES MAX) - with radio module ACG8069

*** Remote control management can be enabled only by the RIB GATE app.**

R-AUX normally works as a courtesy light for 3 minutes.

Through the RIB GATE app it is possible to configure the operation of this relay as desired.

Programming can be done only when the gate is stationary.

1 - Set **DIP 1 to ON**, **DIP 2 to ON** and then **DIP 3 to ON**. DL12 flashes orange for 10 s.

2 - Press the transmitter button (usually channel C) within the allotted 10 s. If the transmitter is properly memorized LED DL12 blinks green and the buzzer emits a tone. The 10 s are automatically renewed (DL12 flashes orange) in order to memorize next transmitter.

3 - To finish programming wait 10 s, or press the PROG button briefly. The LED DL12 stops flashing.

4 - Reset **DIP 1, 2, 3 to OFF**.

REMOTE PROGRAMMING NEW REMOTE CONTROLS DEDICATED TO THE R-AUX RELAY

1 - Press the button on the valid remote control dedicated to pedestrian opening of the gate 3 times in rapid succession. The buzzer will sound 3 times for 1 second and the flasher will flash for 4 seconds to signal the activation of the procedure.

2 - Immediately then press the same button once on the new remote control(s) you want to register. The buzzer will sound 1 time to confirm the registration of each new remote control. Wait 4 seconds for the procedure to exit. The flasher will turn off.

If you do not want to use this function, set DIP 3 to ON to deactivate it.

RADIO CODES CANCELLATION PROCEDURE (FOR R-AUX RELAY)

Cancellation can only be performed when the gate is stationary.

1 - Set **DIP 1 to ON**, **DIP 2 to ON** and then **DIP 3 to ON**. LED DL12 flashes green for 10 s.

2 - During these 10 s press and hold the PROG button for 5 s. Memory cancellation is indicated by two green flashes of LED DL12 and two tones of the buzzer.

3 - LED DL12 blinks orange again for 10 s and you can add new codes as shown above.

4 - Re-Set **DIP 1, 2, 3 to OFF**.

RADIO CODES MEMORY FULL INDICATOR (FOR R-AUX RELAY)

Indication is visible only when gate is stationary.

1 - Set **DIP 1 to ON**, **DIP 2 to ON** and then **DIP 3 to ON**.

2 - LED DL12 flashes green 6 times if the memory is full (1000 codes). LED DL12 blinks red for 10 s enabling possible cancellation of codes.

3 - Re-Set **DIP 1, 2, 3 to OFF**.

OPERATION OF CONTROL ACCESSORIES

OPENING BUTTON (COM A+/OPEN)

When the gate is at a standstill, the button controls the opening movement. If pressed during closing, the gate will re-open.

OPENING BUTTON WITH CLOCK FUNCTION (COM A+/B.I.O.)

The clock function is useful during rush hours, when vehicle traffic is slow (e.g. entrance/exit of workers, emergencies in residential areas, parking lots, etc.).

By connecting a switch and/or a daily/weekly clock to the "COM A+/B.I.O." terminals, you can open the gate (and keep it open) until the switch or clock remain enabled.

All command functions are inhibited with open automation.

When releasing the switch, or once the set time has lapsed, the automation will shut down instantly.

CLOSING BUTTON (COM A+/CLOSE)

When the gate is at a standstill, the button controls the closing movement.

SINGLE CONTROL BUTTON (COM A+/START)

DIP 6 ON => it runs a command sequence open-stop-close-stop-open etc.

DIP 6 OFF => it opens the closed gate. If operated while the gate is opening, the button has no effect. If operated with the gate open, it closes the gate. If operated while the gate is closing, it re-opens the gate.

REMOTE CONTROL FOR BOTH FULL AND PEDESTRIAN OPENING

DIP 6 ON => it runs a cyclical command sequence open-stop-close-stop-open etc.

DIP 6 OFF => it opens the closed gate. If operated while the gate is opening, the button has no effect. If operated with the gate open, it closes the gate. If operated while the gate is closing, it re-opens the gate.

PEDESTRIAN OPENING BUTTON (COM A+/PED.)

Command reserved to partial opening and re-closing of the gate.

When opening, closing or pausing the pedestrian command, you can control the full opening using any command connected on the board.

Using the **DIP 6**, you can choose the operating mode of the pedestrian control button.

DIP 6 ON => it runs a cyclical command sequence open-stop-close-stop etc.

DIP 6 OFF => it opens the closed gate. If operated while the gate is opening, the button has no effect. If operated with the gate open in pedestrian mode, it closes the gate. If operated while the gate is closing, it re-opens the gate.

MANUAL RELEASE (LED DL16)

The position of the unlocking lever is controlled electronically, so if you unlock the operator, the microswitch contact will open (led DL16 turns OFF) and the controls are not enabled.

When you reposition the release lever, and after running a command, the first movement will take place at slow speed. Only after completing this first movement, the operator will resume work at the set speed.

OPERATION OF SAFETY DEVICES

PHOTOCELL (COM A+/PHOT) - Safety function PL "b" according to EN13849-1

With the photocell enabled, the buzzer emits 1 tone.

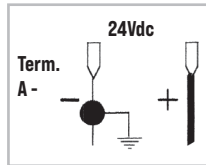
DIP 4 OFF => with gate closed, if an obstacle stops the photocell beam, even if an opening command is given, the gate does not open. During operation, the photocells intervene both during opening (with the gate opening only after freeing the photocell beam), and closing (with reverse motion recovery only after freeing the photocell beam).

DIP 4 ON => with the gate closed, if an obstacle is in front of the photocell beam and the control to open the gate is operated, the gate opens (during opening the photocells will not intervene). The photocells will intervene only during closing (with the gate opening after 1 s, even if the photocells are still engaged).

ATTENTION: In case the receiver led remains lit, malfunctioning of the main supply is suspected.

It is advisable to connect electrically to earth the columns or the photocells stands to the terminal A -, to shield the photocells from external noise.

Be careful not to short circuit the system when the supply phases are inverted!



PHOTOCELLS MONITORING (A+ TEST A-) as required by EN12453 par. 5.1.2

Connect the photocells to A+ TEST/A- and set DIP 7 to ON.

The monitoring consists of a functional test of the photocell run before every movement.

The gate movement is therefore permitted only if the photocells have passed the functional test.

CAUTION: MONITORING OF THE PHOTOCELLS INPUTS (PHOTO 1/PHOTO 2) CAN BE ACTIVATED WITH DIP 7 ON OR DEACTIVATED WITH DIP 7 OFF.

WARNING: If the AUTOTEST feature is enabled and only one photocell is connected, a jumper must be made between the PHOT 1 and PHOT 2 terminals. If the jumper is not made, the AUTOTEST fails and the gate will not move.

FAILED AUTO-TEST ALARM (DIP 7 ON)

If the photocell fails the monitoring test, an alarm is displayed by the blinker lighting up and gate movement is not allowed. Normal operation can be restored only by repairing the photocell and pressing one of the controls.

EDGES (SAFETY STRIPS) (COM A+/EDGE 1/EDGE 2) - Safety function PL "b" according to EN13849-1

If engaged when closing, EDGE 1 reverses the motion in opening. If edge remains engaged, it doesn't permit the closing.

If engaged during opening, EDGE 2 reverses the motion in closing. If edge remains engaged, it doesn't permit the opening.

If edges are not used, jump the terminals COM A+/EDGE1/EDGE2.

The movement will restart at a slow speed until the opening or closing limit switch is reached.

EDGE ALARM

Flasher and buzzer are activated with 2 tones every 5 s for one minute.

EDGE MONITORING (as required by EN12453 par. 5.1.2)

Using the APP card and the RIB GATE App, it is possible to enable monitoring of mechanical edges (NC with 8K2 resistance) and resistive edges (NO with 8K2 resistance).

STOP BUTTON (COM A+/STOP) - Safety function PL "b" according to EN13849-1

During the movement, the stop button will stop the gate.

If the STOP button is pressed when the gate is fully open (or partially using the pedestrian command) the automatic closure will be temporarily excluded (if enabled via trimmer ACT with led DL11 ON). It is therefore necessary to give a new command to close the gate.

Closing the gate will re-enable automatic closing (if enabled via trimmer ACT with led DL11 ON).

HEATER FUNCTION (DIP 13 - ON)

Allows the operator to always operate at a temperature suitable for the operation.

This device automatically turns on only when the gate is at a standstill and the opening or closing limit-switch engaged, at an ambient temperature of the motor of 0° C, detected by the sensor mounted on the board.

When the motor is in motion, the heater is turned OFF.

After 10 s that the gate remains stationary, the heater is activated (if the motor ambient temperature is less than or equal to 0° C).

When the motor reaches a temperature of 3° C, the heater shuts down, maintaining the environmental conditions at a constant temperature.

VISUAL AND SOUND ALARMS

FLASHER

IMPORTANT: This electronic panel can power only one flasher with flashing circuit (ACG7072) 24 V and 20 W maximum.

If you exceed 20 W, the electronic panel's logic will be compromised, with the system possibly stopping.

PRE-FLASHING FUNCTION

DIP 5 OFF => the motor and flasher start simultaneously.

DIP 5 ON => the flasher starts 3 s before the motor.

BUZZER

Signals that the safety devices have triggered an alarm, alarm status and codes saved/deleted in memory.

GATE OPEN 24Vdc INDICATOR LIGHT (COM A+/SIGNAL -)

The light signals that the gate is open, partly open or not completely closed. Only when the gate is completely closed does the light turn OFF.

During opening, it flashes slowly.

When the gate is stationary or opened, it is permanently on.

During closing, it flashes quickly

N.B.: Max 3 W. If warning lights are in excess, the control panel processes will be endangered with possible stop of all operations.

OPERATION AFTER BLACK-OUT (WITHOUT BATTERIES)

At the time of the blackout, gate status is saved in the memory.

When mains voltage is restored:

If the gate is located on the opening or closing limit switch, operating the control will close or open the gate with the saved data.

If the gate is in intermediate position, operating the control will open the gate slowly until it reaches the opening limit switch. After completing this first movement, the operator will resume work at the set speed.

TECHNICAL SPECIFICATIONS

- Temperature range	-10 ÷ +55°C
- Humidity	< 95% without condensation
- Power supply	230V~ ±10% (120V 60Hz on request)
- Frequency	50/60 Hz
- Transformer power	150VA - main 230Vac - 24Vac/10Vac
- Maximum absorption	130 mA
- Power supply microinterruptions	100ms
- Maximum power SIGNAL output	24 Vdc 3 W
- Flasher maximum load	24 Vdc 20 W
- Current available for photocells and accessories	24Vdc 500 mA ±15%
- Battery power supply	24Vdc

RADIO TECHNICAL SPECIFICATIONS (model L1 24V-CRX)

- Reception frequency 433,92MHz
- Impedence 52 ohm
- Sensitivity >1µV
- Feedback control PLL
- Memory storage (codes) 1000

On the board there are self-resetting fuses which intervene in the event of a short circuit, interrupting the output assigned to them.
In the event of troubleshooting, it is advisable to disconnect all the removable connectors and insert them one at a time in order to more easily identify the cause of the fault.

- All inputs must be used as clean contacts because the power is generated internally (secure power) to the board and is set up to ensure compliance with double or reinforced insulation with regard to dangerous voltage.
- Any external circuits connected to the outputs of the control panel must be made in such a manner as to ensure compliance with double or reinforced insulation with regard to dangerous voltage.
- All inputs are controlled by a programmed integrated circuit that performs a self check every time it starts operating.

TROUBLESHOOTING

Update the firmware of the panel using the APP card and the RIB GATE app.
After making all the connections, carefully following the diagram and having placed the gate in intermediate position, check the correct lighting of led DL4, DL5, DL6, DL7, DL8, DL9, DL10 and DL16.

If one of the led does not turn on, check the following and replace any faulty components if necessary (perform the inspection with the gate always in intermediate position):

- DL4 OFF limit switch that stops gate closure is faulty
- DL5 OFF limit switch that stops gate opening is faulty
- DL6 OFF stop button fault (if the STOP is not connected, run the jumper between COM and STOP).
- DL7-8 OFF photocell fault (if the photocells are not connected, run the jumper between COM and PHOT 1/PHOT 2).
- DL9-10 OFF safety edge fault (if the edge is not connected, run the jumper between COM and EDGE 1/EDGE 2).
- DL12 OFF the radio module is working correctly.
ON the radio module is missing or faulty or not recognized after a power surge.
- DL13 ON Some functions are enabled via smartphone, so via smartphone check the card functions as the dips/trimmers status may not be true.
- DL16 OFF manual release open (close it to restore the operation)

During operation, hold **DIP 1 to ON**, make sure that when the gate opens, the green led DL2 turns on and that when the gate closes, red led DL3 turns on.

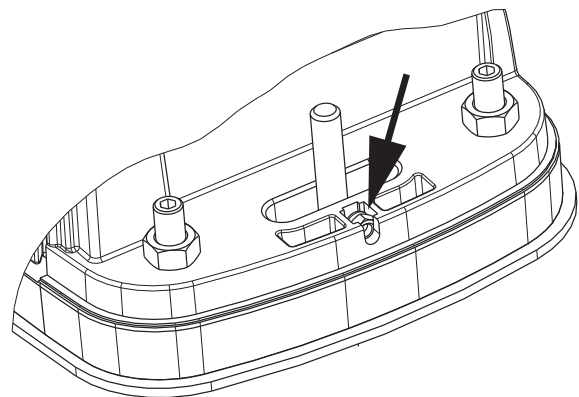
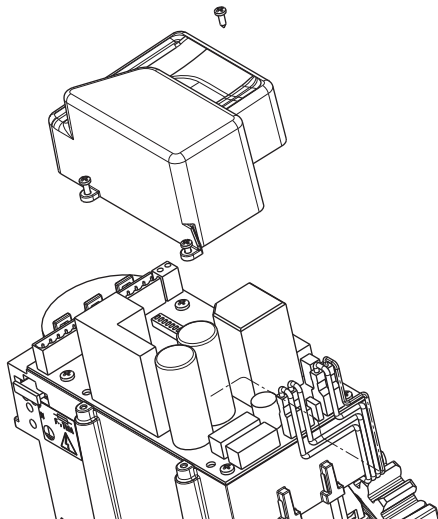
Otherwise, perform a new full opening programming sequence.

PROBLEM	SOLUTION
After making the various connections and supplying voltage, all leds are OFF.	On the board there are self-resetting fuses which intervene in the event of a short circuit, interrupting the output assigned to them. In the event of troubleshooting, it is advisable to disconnect all the removable connectors and insert them one at a time in order to more easily identify the cause of the fault. Check the integrity of fuse F1. In case of faulty fuse, replace it only with one of the same value: F1 = T 1,6A
The photocells are not lit and the motor does not rotate	Check the integrity of fuse F2. In case of faulty fuse, replace it only with one of the same value: F2 = T 10A
The gate opens, but does not close after the set time	Check that led DL11 turns on. If it is OFF, turn the trimmer clockwise. Or, check that the photocells are not engaged. It is also possible that you have pressed the STOP button with the gate open, temporarily blocking the automatic closure.
The gate does not open and does not close when pressing the various OPEN-CLOSE-START-RADIO buttons.	Edge contact or photocell fault with DIP 4 OFF . Adjust or replace its contact. Or, check that manual release device is not open.
When the gate is open, pressing the START, RADIO button or the CLOSE button, the gate does not move.	Clock function enabled. Check the status of the B.I.O. input. Or, photocells auto-test failed => check the connections between the electronic panel and photocells.
the gate triggers an alarm due to over-current, signalled by 3 buzzer tones.	Adjust the SENS trimmer counterclockwise
LED DL1 flashes ON/OFF 250ms.	DIP 1 set to ON. Set it to OFF. Or, an edge or photocell is broken. The movement is allowed only by hold-to-run command.
When programming the time, the gate stops and the buzzer emits a tone for 10 s, with pause for 2 s.	Incorrect programming sequence. Set DIP 2 to OFF . Bring the gate at about 20 cm from the end closure and repeat the programming sequence.
Impact sensor intervenes during the movement	Turn the SENS trimmer clockwise
The buzzer emits 2 long tones and the gate does not move	Safety edge with 8,2 KΩ resistor. Remove the resistor or configure the EDGE input via the RIBGATE app
The remote control does not work. Led DL12 lit red	Lack of radio module in connector J6 or faulty radio module.

After verifying the correct functioning of the operator, fix the control panel cover and secure the cover of the operator using the screws and bolts provided. The fixing bolt of the operator's cover must be tighten into the nuts previously inserted in the aluminum base.

TABLE SUMMARISING VISUAL AND SOUND ALARMS SIGNALS DURING PROGRAMMING SEQUENCE

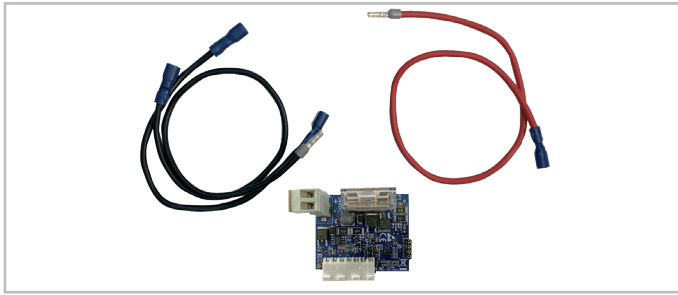
EVENT	BUZZER STATUS	FLASHER STATUS	DL1 LED STATUS
DIP 1 ON (hold-to-run mode) Or failure of a safety device	OFF	OFF	Flashes ON/OFF 250 ms
DIP 2 ON (full stroke programming)	OFF	OFF	Flashes ON/OFF 500 ms
DIP 2 ON > DIP 1 ON (pedestrian stroke programming)	OFF	OFF	Flashes ON/OFF 500 ms
Programming sequence stopped due to intervention of a safety device	10 s tone with 2 s pause	OFF	On steady
EVENT	BUZZER STATUS	FLASHER STATUS	DL10 LED STATUS
No transmitter code entered	OFF	OFF	Flashes red/green
DIP 1 ON > DIP 2 ON - transmitter code programming for full opening	OFF	OFF	Flashes red for 10 s
DIP 1 ON > DIP 3 ON - transmitter code programming for pedestrian opening	OFF	OFF	Flashes green for 10 s
DIP 1 ON > DIP 2 ON > DIP 3 ON - transmitter code programming for R-AUX relay	OFF	OFF	Flashes orange for 10 s
Correct transmitter codes programming for full opening and R-AUX relay	1 Tone	OFF	Turns green once
Correct transmitter code programming for pedestrian opening	1 Tone	OFF	Turns red once
Remote control code not present in memory	OFF	OFF	Red flash
Memory saturated by remote control codes (1000 codes saved)	OFF	OFF	Runs 6 green flashes
Radio code deletion for full opening, pedestrian opening, R-AUX relay	2 Tones	OFF	Runs 2 green flashes
WARNING SIGNALS DURING OPERATION			
EVENT	BUZZER STATUS	FLASHER STATUS	LED STATUS AND SIGNAL OUTPUT
Stop button pressed	OFF	OFF	Led DL6 turns OFF
Photocell intervention	1 Tone	OFF	Led DL7-8 turns OFF
Edge intervention	2 Tones	OFF	Led DL9-10 turns OFF
Intervention of impact sensor	3 Tones	OFF	No led combined
Failure of a safety device or safety device engaged for too long	OFF	OFF	Led DL1 flashes ON/OFF 250 ms
Operation with emergency batteries (24 vdc)	OFF	Flashes during movement	Signal output flashes ON/OFF twice for 250 ms followed by a pause of 2 s
Emergency batteries low signal	1 Tone every 5 s for 1 minute (It is renewed by giving a command)	OFF	Signal output flashes continuously ON/OFF for 500 ms
Operation with emergency batteries charged by solar panels	OFF	OFF	Signal output flashes ON/OFF 3 times for 250 ms followed by a pause of 2 s
Alarm from edge	2 Tones every 5 s for 1 minute (It is renewed by giving a command)	Flashes for 1 minute	No led combined
Impact sensor alarm	3 Tones every 5 s for 1 minute (It is renewed by giving a command)	Flashes for 1 minute	No led combined
Failed photocells auto-test alarm	4 Tones every 5 s for 1 minute (It is renewed by giving a command)	OFF	No led combined
Encoder failure alarm	5 Tones every 5 s for 1 minute (It is renewed by giving a command)	OFF	Led DL14 OFF
Functional block activated by smartphone	OFF	OFF	Led DL12 is steady on green.
Achievement of set cycles	6 Tones every 5 s (It is renewed by giving a command)	OFF	No leds matched
Energy saving activated by smartphone	OFF	OFF	Blue led flashes once every 5 s



ACCESSORIES

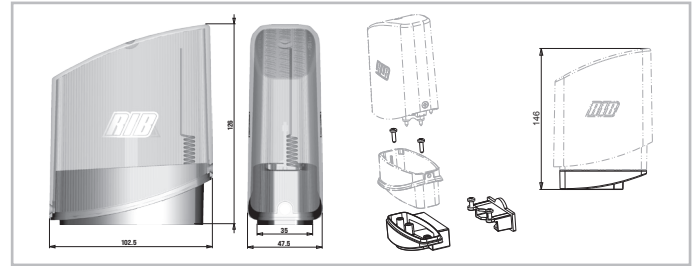
For the connections and the technical data of the optional equipments follow the relevant handbooks.

BATTERIES CHARGER CARD



code ACG4776

SAIL



SAIL orange with built-in flashing board
SAIL white with built-in flashing board
SAIL LATERAL SUPPORT

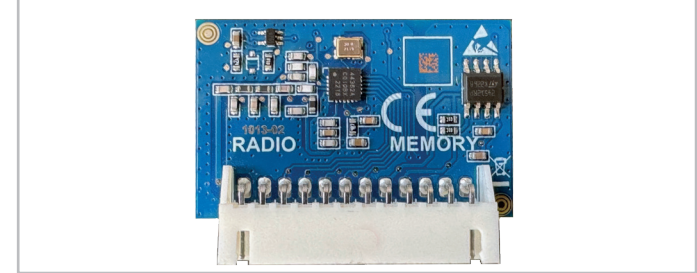
code ACG7072
code ACG7078
code ACG8054

RADIO TRANSMITTER SUN

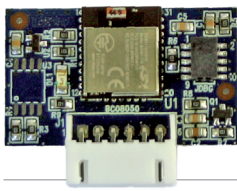


SUN 2CH	code ACG6052	SUN 4CH	code ACG6054
SUN CLONE 2CH	code ACG6056	SUN CLONE 4CH	code ACG6058
SUN PRO 2CH	code ACG6210	SUN PRO 4CH	code ACG6214

RADIO MODULE 433MHz



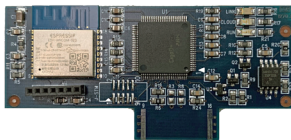
code ACG8069



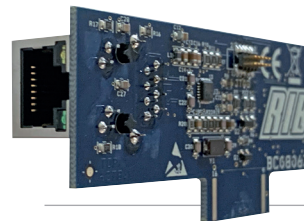
APP8050 APP card
to manage the control panel using
Bluetooth 4.2 transmission



APP8054 APP+ card
to manage the control panel using
Bluetooth 4.2 transmission



APP8064 Wi-Fi module for APP+ card
to manage the control panel using the
local Wi-Fi network (WLAN)



APP8066 RJ45 module for APP+ card
to manage the control panel using the
local network (LAN)

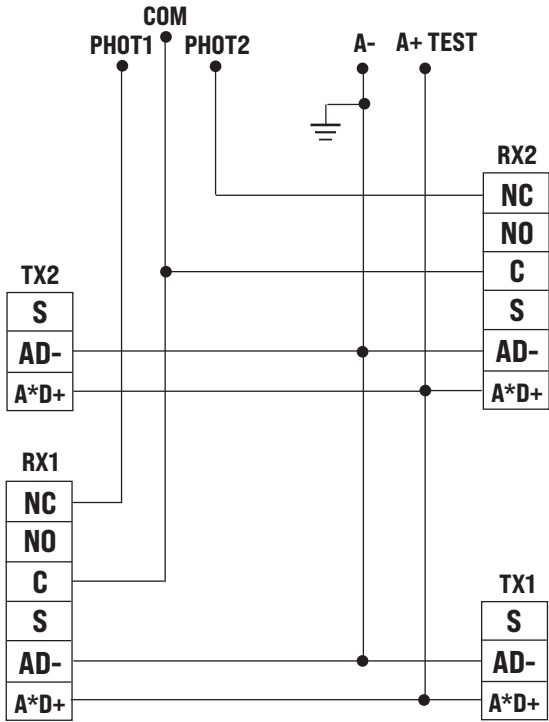


APP8060 Clock module for APP+ card
to add access control features to the
control panel

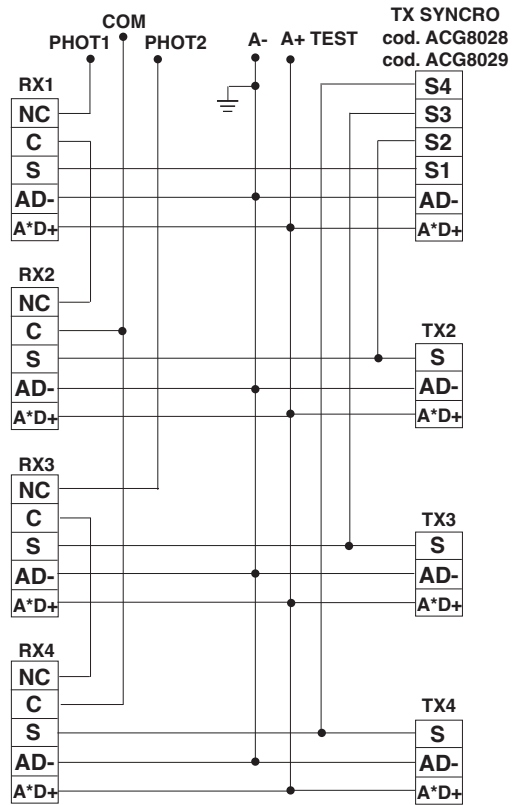


PHOTOCELLS CONNECTIONS

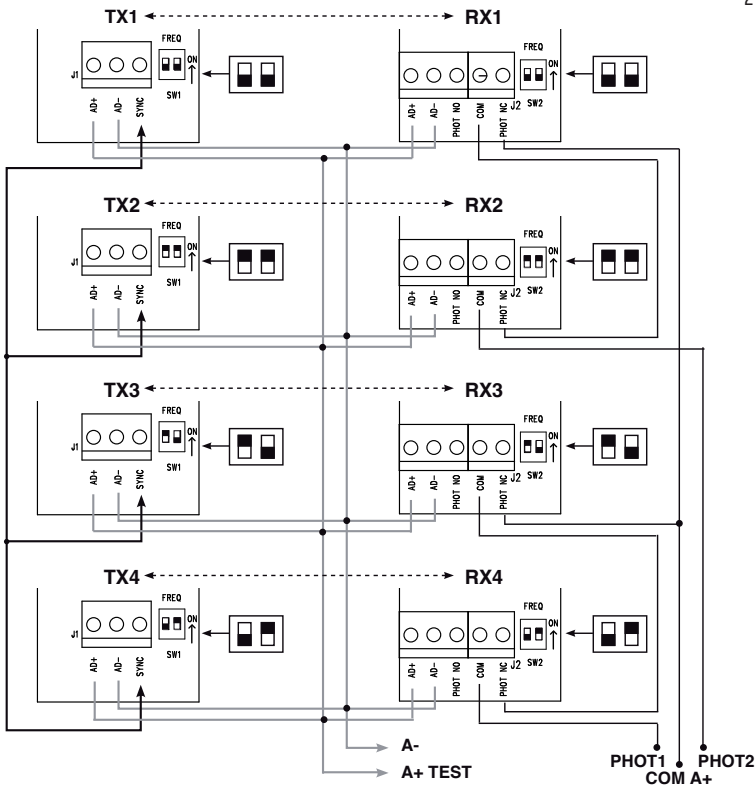
2 photocells FIT SLIM, FIT SYNCRO with self-test



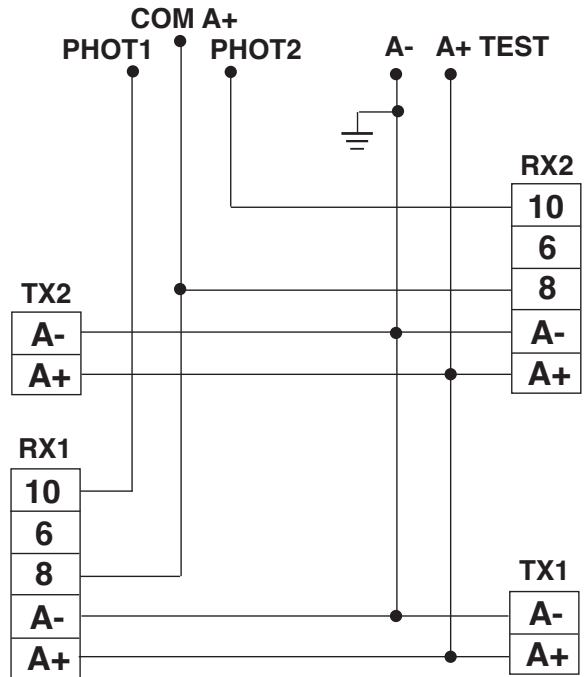
4 FIT SLIM / FIT SYNCRO photocells with self-test and infrared signal synchronizer



4 NOVA photocells synchronized with self-test



2 photocells F97P, F97I with self-test



WARNING: If the AUTOTEST feature is enabled and only one photocell is connected, a jumper must be made between the PHOT 1 and PHOT 2 terminals. If the jumper is not made, the AUTOTEST fails and the gate will not move.

إقرار التضمين للماكينة شبه المكتملة - توجيه الماكينات EC/2006/42، الملحق الثاني، "ب"
Declaration of incorporation for partly completed machinery - Machinery Directive 2006/42/EC, Annex II., B

R.I.B. S.r.l. - Via Matteotti, 162 - 25014 Castenedolo - Brescia - Italy
Tel. ++39.030.2135811 - www.ribind.it - ribind@ribind.it

موديل الجهاز: Apparatus model :	K400 L1 24V-CRX	الغرض من الإقرار: Object of the declaration :		
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تم تطبيق المتطلبات الأساسية التالية لتوجيه الماكينات (EC/2006/42) والالتزام بها:
· ألفت الوثائق التقنية ذات الصلة طبقاً للباب "ب" من الملحق السابع: إن مثل هذه الوثائق، أو أجزاءها، سوف تُرسل بالبريد أو بوسائل إلكترونية استجابة للطلب المقدم والمستلم من السلطات الوطنية المعنية.
· هذه ماكينة مكتملة تقريباً، وهي مطابقة لبنود وأحكام التوجيهات الأوروبية الأخرى: التوجيهان EU/2014/30 و EU/2014/35
· طبقت جميع المتطلبات الأساسية ذات الصلة كما هي واردة في الملحق الأول من التوجيه الأوروبي EC/2006/42 على المنتج. يوفر الامتثال للمعايير المتسقة المذكورة افتراضاً للمطابقة مع المتطلبات الأساسية المحددة طبقاً للتوجيه الذي تغطيه هذه المعايير أو تمثل أجزاءً منه.
⚠ تحذير: قد تُطبق متطلبات أخرى أو توجيهات أوروبية أخرى على المنتجات التي تندرج تحت نطاق هذا الإقرار.

The following essential requirements of the Machinery Directive (2006/42/EC) and UK Supply of Machinery (Safety) Regulations 2008 are abided by and applied:

- The relevant technical documentation is compiled in accordance with Part B of Annex VII; such documentation, or parts of it, will be sent by post or by electronic means, in response to a motivated request received from the qualified national authorities.
- This almost complete-machinery is conformed with the provisions of these others EC directives: Directives 2014/30/UE, 2014/35/UE and 2014/53/UE and UK Electromagnetic Compatibility Regulations 2016, Electrical Equipment (Safety) Regulations 2016, Radio Equipment Regulations 2017
- All relevant essential requirements as given in Annex I of the EU Directive 2006/42/EC have been applied to the product. Compliance with the cited harmonized standards provides presumption of conformity with the specified essential requirements of the Directive covered by those Standards or parts thereof.
- ⚠ Other requirements and other EU/UK Directives may be applicable to the products falling within the scope of this Declaration

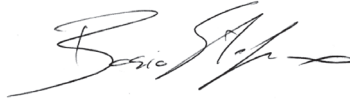
إن الغرض من الإقرار المذكور أعلاه يتوافق مع تشريع الاتساق المعني والخاص بالاتحاد:

The object of the declaration described above is in conformity with the relevant Union harmonisation legislation:

BS EN 12453:2022	BS EN 13849-2:2013	BS EN 55014-1:2023	BS EN 61000-3-2/A2:2024	BS EN 61000-6-4:2022
BS EN 12635:2009	ETSI EN 300 220-1 v3.1.1:2017	BS EN 55014-2:2024	BS EN 61000-3-3/A2:2024	
BS EN 12978:2025	ETSI EN 300 220-3-1 v2.1.1:2016	BS EN 60335-1/A16:2024	BS EN 61000-6-1:2019	
BS EN 13241:2016	BS EN 301 489-1 V2.2.3:2019	BS EN 60335-2-103:2023	BS EN 61000-6-2:2019	
BS EN 13849-1:2023 PL-CAT2	BS EN 301 489-3 V2.3.2:2023	BS EN 60529:1992+A2:2013	BS EN 61000-6-3:2023	

النتج السابق ذكره لا يمكن أن يعمل بصورة مستقلة و إنما هو للتركيب في شبكة مكونة من عناصر أخرى، الرجوع للمادة 6 فقرة 2 من لوائح 2006/42/الوحدة الأوروبية (ألات) و تعديلاتها اللاحقة , و من أجله نعلن منع وضعة في الخدمة قبل أن يتم إعلان مطابقة الشبكة التي سيعمل فيها للمواد اللائحة

- This product can not work alone and was designed to be fitted into a system made up of various other elements. Hence, it falls within Article 6, Paragraph 2 of the EC-Directive 2006/42 (Machines) and following modifications, to which respect we point out the ban on its putting into service before being found compliant with what is provided by the Directive.



(Bosio Stefano - Legal Representative - الممثل القانوني)

Castenedolo, 01-03-2025

CE UK CA
صنع في إيطاليا
MADE IN ITALY



AUTOMATISMI PER CANCELLI
AUTOMATIC ENTRY SYSTEMS

COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY DNV
ISO 9001

تم تطوير هذا المنتج بالكامل وبنائه في إيطاليا
· This product has been completely developed and built in Italy