WORM SCREW AUTOMATION FOR SWING GATES
WORM SCREW AUTOMATION FOR SWING GATES

CARDIN PRO SERIES BL

The automation is made up of a series of components consisting of an installation management programming unit, 1 or 2 worm screw rams and a special connecting cable. The ram, built around a robust structure in cast aluminium, features an efficient motor that works in complete synergy with a high performance reduction unit that is isolated inside a waterproof compartment and is lubricated using permanently fluid grease. The special, well thought out, three piece carter, the rotating screw supported by double bearings and the special drag screw make it a top of the range ram with a unique performance level. It moves silently and fluently and is controlled (via an encoder integrated into the motor) by the programmer supplied with the product.

These horizontal action rams are extremely easy to fit without need for brickwork and they offer excellent service in terms of the number of manoeuvres.

Use with the following Cardin programmers CC242ETOPCB, CC242EXTOPCB.

Gate position is encoder-controlled and self-programming thus reducing installation times to a minimum and optimising the programming procedure. Repositioning takes place automatically whenever foreign objects get in the way of the gate as it is moving. The electronic control unit is completed by the anti-crush and “soft start” and “soft stop” functions.

In case of blackouts, emergency manoeuvring is guaranteed by a key-operated manual release mechanism that is efficient under all working conditions.

The ram can be fitted with an external lever-operated locking and unlocking system using a remote cord.
## ELECTROMECHANICAL RAM WITH A 24V MOTOR

Self-locking ram controlled by encoder. The geared motor locks the gate leaf in the closed position.

- Supplied with all the fittings necessary for mounting one ram including the front and rear brackets in galvanised steel.
- ECU to be ordered separately CC242ETOPCB / CC242EXTOPCB.
- Standard version for gates with a maximum length of 2.5m, maximum weight 300kg.

### Specifications
- **Length**: 2.5m max
- **Angle**: 100° max
- **Weight**: 300 kg

---

## ELECTROMECHANICAL RAM WITH A 24V MOTOR

Self-locking ram controlled by encoder. The geared motor locks the gate leaf in the closed position.

- Supplied with all the fittings necessary for mounting one ram including the front and rear brackets in galvanised steel.
- ECU to be ordered separately CC242ETOPCB / CC242EXTOPCB.
- Long version for gates with a maximum length of 3.5m (4m with an electric lock), maximum weight 400kg.

### Specifications
- **Length**: 4m max
- **Angle**: 100° max
- **Weight**: 400 kg

---

## OPTIONAL BRACKETS

Front and rear brackets in galvanised steel.

**BLSTAE**

---

## 10m CABLE

With end sleeves.

**CABPC10**

---

For the electric locks see page 163.
SERIES BL

SELF-PROGRAMMING ECU FOR BLEGOS/BLESOL
Programmer for the management of two encoder-controlled motors.
Power supply 230Vac.
Motor power supply 24Vdc.
Maximum power yield 250W.
Fitted with a multi-decoding module S449-S486-S504-S508.
Compatible with the INTPRG-3GWF system that allows the monitoring and programming of system parameters from remote positions.
Batteries and a battery charger in the versions CC242ETOPCB and CC242EXTOPCB.
For more information turn to page 172.

ELECTRONIC PROGRAMMER

ECU, BATTERY CHARGER AND NiMH BATTERIES

KBNIMH-1

LIMITS OF USE BLEGOS - BLESOL

Note: for an optimised installation use the values highlighted in grey.

BLEGOS (H min. 420 - H max. 800)

<table>
<thead>
<tr>
<th>α°</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>C2</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>90</td>
<td>132</td>
<td>200</td>
<td>0</td>
<td>132</td>
<td>600</td>
</tr>
<tr>
<td>90</td>
<td>132-182</td>
<td>200</td>
<td>0-50</td>
<td>132</td>
<td>600</td>
</tr>
<tr>
<td>90</td>
<td>183-203</td>
<td>180</td>
<td>51-70</td>
<td>132</td>
<td>620</td>
</tr>
<tr>
<td>90</td>
<td>204-224</td>
<td>160</td>
<td>71-90</td>
<td>132</td>
<td>640</td>
</tr>
<tr>
<td>90</td>
<td>183-203</td>
<td>160</td>
<td>91-110</td>
<td>92</td>
<td>630</td>
</tr>
<tr>
<td>90</td>
<td>204-224</td>
<td>150</td>
<td>110-130</td>
<td>92</td>
<td>650</td>
</tr>
<tr>
<td>110</td>
<td>132</td>
<td>200</td>
<td>0</td>
<td>132</td>
<td>600</td>
</tr>
<tr>
<td>110</td>
<td>132-182</td>
<td>180</td>
<td>0-50</td>
<td>132</td>
<td>620</td>
</tr>
<tr>
<td>110</td>
<td>183-203</td>
<td>170</td>
<td>51-70</td>
<td>92</td>
<td>630</td>
</tr>
<tr>
<td>110</td>
<td>204-224</td>
<td>160</td>
<td>71-90</td>
<td>92</td>
<td>640</td>
</tr>
</tbody>
</table>

BLESOL (H min. 420 - H max. 950)

<table>
<thead>
<tr>
<th>α°</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>C2</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>90</td>
<td>132</td>
<td>240</td>
<td>0</td>
<td>132</td>
<td>700</td>
</tr>
<tr>
<td>90</td>
<td>132-182</td>
<td>220</td>
<td>0-50</td>
<td>132</td>
<td>720</td>
</tr>
<tr>
<td>90</td>
<td>183-203</td>
<td>210</td>
<td>51-70</td>
<td>132</td>
<td>720</td>
</tr>
<tr>
<td>90</td>
<td>204-224</td>
<td>200</td>
<td>71-90</td>
<td>132</td>
<td>730</td>
</tr>
<tr>
<td>90</td>
<td>183-203</td>
<td>180</td>
<td>91-110</td>
<td>92</td>
<td>740</td>
</tr>
<tr>
<td>90</td>
<td>204-224</td>
<td>180</td>
<td>110-130</td>
<td>92</td>
<td>760</td>
</tr>
<tr>
<td>110</td>
<td>132</td>
<td>240</td>
<td>0</td>
<td>132</td>
<td>700</td>
</tr>
<tr>
<td>110</td>
<td>132-182</td>
<td>220</td>
<td>0-50</td>
<td>132</td>
<td>720</td>
</tr>
<tr>
<td>110</td>
<td>183-203</td>
<td>210</td>
<td>51-70</td>
<td>132</td>
<td>720</td>
</tr>
<tr>
<td>110</td>
<td>204-224</td>
<td>200</td>
<td>71-90</td>
<td>132</td>
<td>730</td>
</tr>
<tr>
<td>110</td>
<td>183-203</td>
<td>180</td>
<td>91-110</td>
<td>132</td>
<td>740</td>
</tr>
<tr>
<td>110</td>
<td>204-224</td>
<td>180</td>
<td>110-130</td>
<td>132</td>
<td>760</td>
</tr>
</tbody>
</table>
OVERALL DIMENSIONS

INSTALLATION EXAMPLE

LEGEND

1. Geared motor (left)
2. Geared motor (right)
3. Internal photocells
4. External photocells
5. Warning lights
6. Mechanical selector switch
7. Electric lock
8. External aerial
9. All pole circuit breaker
10. Mains cable 230Vac
11. Channelling for Cardin connection cable CABPC10
12. Channelling route for low voltage wires
13. Electronic programmer
14. Lateral protective photocells
15. Opening direction stop buffers

Attention: The drawing is purely indicative and is supplied as a working base from which to choose the Cardin electronic components making up the installation. This drawing therefore does not lay down any obligations regarding the execution of the installation.
These reliable and robust rams, available in 24V intensive and 230V versions, are easy to fit without requiring brickwork, offer excellent service with regard to the number of manoeuvres and are particularly suited for installations with columns of all dimensions.

The following models are available:
- self-locking; the geared motor locks the gate leaf in the closed position.
- reversible; an electric lock must be fitted to guarantee that the gate leaf locks in the closed position.

The units do not feature on board electronics and we advise you to use the Cardin electronic programmers T624 - T600.

Gate positioning control is carried out via encoder with the help of mechanical travel limits and the self-programming system reduces installation times to a minimum and optimises the programming procedure.

Repositioning takes place automatically whenever foreign objects get in the way of the gate as it is moving. The electronic control unit is completed by the anti-crush and "soft start" and "soft stop" functions.

In case of blackouts, emergency manoeuvring is guaranteed (in the self-locking versions) by a practical lever-operated manual release system protected by a personalised key that is efficient under all working conditions.

An electric travel limit kit, guaranteeing precise control of the gate position, is also available.
CARDIN TRADE

SERIES BL

ELECTROMECHANICAL RAM WITH A 24V MOTOR

BL ASY324

Self-locking encoder-controlled ram with mechanical travel limits. The geared motor locks the gate leaf in the closed position. Supplied with all the fittings necessary for mounting one ram including the front and rear brackets in galvanised steel. Cardin ECU to be ordered separately T624. Standard version for gates max. length 3m, max. weight 250kg.

24V
3m max
110° max
250 kg

ELECTROMECHANICAL RAM WITH A 24V MOTOR

BL ASY524

Self-locking encoder-controlled ram with mechanical travel limits. The geared motor locks the gate leaf in the closed position. Supplied with all the fittings necessary for mounting one ram including the front and rear brackets. Cardin ECU to be ordered separately T624. Long version for gates max. length 5m, max. weight 300kg.

24V
5m max
110° max
300 kg

ELECTROMECHANICAL RAM WITH A 24V MOTOR

BL ASY524REV

Reversible encoder-controlled ram with mechanical travel limits. An electric lock must be fitted to guarantee that the gate leaf locks in the closed position. Supplied with all the fittings necessary for mounting one ram including the front and rear brackets. Cardin ECU to be ordered separately T624. Long version for gates max. length 5m, max. weight 300kg.

24V
5m max
110° max
300 kg

For the electric locks see page 163.
ELECTROMECHANICAL RAM WITH A 230V MOTOR
Self-locking encoder-controlled ram with mechanical travel limits. The geared motor locks the gate leaf in the closed position. Supplied with all the fittings necessary for mounting one ram including the front and rear brackets in galvanised steel.
ECU to be ordered separately T600.
Standard version for gates max. length 3m, max. weight 250kg.

For the electric locks see page 163.

ELECTROMECHANICAL RAM WITH A 230V MOTOR
Reversible encoder-controlled ram with mechanical travel limits. An electric lock must be fitted to guarantee that the gate leaf locks in the closed position. Supplied with all the fittings necessary for mounting one ram including the front and rear brackets in galvanised steel. ECU to be ordered separately T600.
Standard version for gates max. length 3m, max. weight 250kg.
CARDIN TRADE
SERIES BL

MECHANICAL GATE LOCK
for installations with two gates and a horizontal electric lock.

FIXED BRACKETS
front and rear.

ADJUSTABLE BRACKETS
front and rear.

ELECTRICAL TRAVEL LIMITS
for 3m gates.
for 5m gates.

ELECTRONIC PROGRAMMER
for one or two 230V encoder-controlled motors complete with torque adjustment and deceleration. Factory set for the insertion of an open collector receiver card.

ELECTRONIC PROGRAMMER
for one or two 24V encoder-controlled motors complete with speed regulation (with ECU data exchange) and deceleration. Factory set for the insertion of an open collector receiver card.

BATTERY CHARGER
for use with 24V programmers.

EXTERNAL BOX
with 2 batteries 12V 7Ah.

POWER SUPPLY KIT
Solar panels for use with all 24Vdc automation.

Compatible with the data exchange system between digital devices (smartphone, tablet, etc.) and the Cardin multifunctional control units. See section 24V ECU INTERFACE DEVICES on page 186
### LIMITS OF USE BLASY

**BLASY324 - BLASY3 - BLASY3REV (E min. 476 / E max. 826 / F = 350)**

<table>
<thead>
<tr>
<th>α°</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>C2</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>90</td>
<td>170</td>
<td>170</td>
<td>0</td>
<td>170</td>
<td>650</td>
</tr>
<tr>
<td>90</td>
<td>120-170</td>
<td>170</td>
<td>0 - 50</td>
<td>120</td>
<td>650</td>
</tr>
<tr>
<td>90</td>
<td>150-170</td>
<td>170</td>
<td>51 - 70</td>
<td>100</td>
<td>650</td>
</tr>
<tr>
<td>90</td>
<td>150-170</td>
<td>170</td>
<td>71 - 90</td>
<td>80</td>
<td>650</td>
</tr>
<tr>
<td>90</td>
<td>165-185</td>
<td>150</td>
<td>91-110</td>
<td>75</td>
<td>665</td>
</tr>
<tr>
<td>90</td>
<td>185-205</td>
<td>135</td>
<td>111-130</td>
<td>75</td>
<td>685</td>
</tr>
<tr>
<td>110</td>
<td>170</td>
<td>170</td>
<td>0</td>
<td>170</td>
<td>650</td>
</tr>
<tr>
<td>110</td>
<td>90-140</td>
<td>150</td>
<td>0 - 50</td>
<td>90</td>
<td>670</td>
</tr>
<tr>
<td>110</td>
<td>130-150</td>
<td>150</td>
<td>51 - 70</td>
<td>80</td>
<td>670</td>
</tr>
<tr>
<td>110</td>
<td>135-155</td>
<td>150</td>
<td>71 - 90</td>
<td>65</td>
<td>670</td>
</tr>
</tbody>
</table>

**BLASY524 - BLASY524REV - BLASY5 - BLASY5REV: (E min. 476 / E max. 976 / F = 500)**

<table>
<thead>
<tr>
<th>α°</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>C2</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>90</td>
<td>170</td>
<td>180</td>
<td>0</td>
<td>170</td>
<td>790</td>
</tr>
<tr>
<td>90</td>
<td>170-220</td>
<td>200</td>
<td>0 - 50</td>
<td>170</td>
<td>770</td>
</tr>
<tr>
<td>90</td>
<td>210-240</td>
<td>200</td>
<td>51 - 70</td>
<td>160</td>
<td>770</td>
</tr>
<tr>
<td>90</td>
<td>210-240</td>
<td>200</td>
<td>71 - 90</td>
<td>120</td>
<td>760</td>
</tr>
<tr>
<td>90</td>
<td>220-240</td>
<td>190</td>
<td>91-110</td>
<td>100</td>
<td>770</td>
</tr>
<tr>
<td>90</td>
<td>240-270</td>
<td>170</td>
<td>110-130</td>
<td>90</td>
<td>780</td>
</tr>
<tr>
<td>110</td>
<td>170</td>
<td>180</td>
<td>0</td>
<td>170</td>
<td>790</td>
</tr>
<tr>
<td>110</td>
<td>170-220</td>
<td>200</td>
<td>0 - 50</td>
<td>170</td>
<td>770</td>
</tr>
<tr>
<td>110</td>
<td>210-240</td>
<td>190</td>
<td>51 - 80</td>
<td>160</td>
<td>775</td>
</tr>
<tr>
<td>110</td>
<td>210-240</td>
<td>190</td>
<td>81 - 120</td>
<td>120</td>
<td>775</td>
</tr>
<tr>
<td>110</td>
<td>220-240</td>
<td>190</td>
<td>121-150</td>
<td>90</td>
<td>775</td>
</tr>
<tr>
<td>100</td>
<td>240-270</td>
<td>180</td>
<td>151-180</td>
<td>90</td>
<td>785</td>
</tr>
</tbody>
</table>

Note: for an optimised installation use the values highlighted in grey.
**CARDIN TRADE**
**SERIES BL**

### RAM SPECIFICATIONS

<table>
<thead>
<tr>
<th></th>
<th>BL ASY324</th>
<th>BL ASY3</th>
<th>BL ASY3REV</th>
<th>BL ASY524</th>
<th>BL ASY524REV</th>
<th>BL ASY5</th>
<th>BL ASY5REV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor power supply</td>
<td>V</td>
<td>24</td>
<td>230</td>
<td>230</td>
<td>24</td>
<td>24</td>
<td>230</td>
</tr>
<tr>
<td>Electrical input</td>
<td>A</td>
<td>2</td>
<td>1.6</td>
<td>1.6</td>
<td>2</td>
<td>2</td>
<td>1.6</td>
</tr>
<tr>
<td>Power input</td>
<td>W</td>
<td>60</td>
<td>370</td>
<td>370</td>
<td>60</td>
<td>60</td>
<td>370</td>
</tr>
<tr>
<td>Thrust</td>
<td>N</td>
<td>1900</td>
<td>2200</td>
<td>1800</td>
<td>1900</td>
<td>1800</td>
<td>2200</td>
</tr>
<tr>
<td>Travel distance (worm screw)</td>
<td>mm</td>
<td>350</td>
<td>350</td>
<td>350</td>
<td>500</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>Duty cycle</td>
<td>%</td>
<td>70</td>
<td>30</td>
<td>30</td>
<td>70</td>
<td>70</td>
<td>30</td>
</tr>
<tr>
<td>Opening time 90°</td>
<td>s</td>
<td>20</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>30</td>
</tr>
<tr>
<td>Maximum opening angle</td>
<td>°</td>
<td>110</td>
<td>110</td>
<td>110</td>
<td>110</td>
<td>110</td>
<td>110</td>
</tr>
<tr>
<td>Protection grade</td>
<td>IP</td>
<td>44</td>
<td>44</td>
<td>44</td>
<td>44</td>
<td>44</td>
<td>44</td>
</tr>
</tbody>
</table>

### OVERALL DIMENSIONS

![Overall Dimensions](image)

**BL ASY324 - BL ASY3 - BL ASY3REV (893 x 137 x 124)**

**BL ASY524 - BL ASY524REV - BL ASY5 - BL ASY5REV (1043 x 137 x 124)**

### INSTALLATION EXAMPLE

**LEGEND**

1. Geared motor (left)
2. Geared motor (right)
3. Internal photocells
4. External photocells
5. Warning lights with aerial
6. Mechanical selector switch
7. Electric lock
8. All pole circuit breaker
9. Sun Power
10. Mains cable 230Vac
11. Channelling for Cardin connection cable CABPC10
12. Channelling route for low voltage wires
13. Electronic programmer
14. Lateral protective photocells
15. Solar panels
16. Opening direction stop buffers

**Attention:** The drawing is purely indicative and is supplied as a working base from which to choose the Cardin electronic components making up the installation. This drawing therefore does not lay down any obligations regarding the execution of the installation.
WORM SCREW AUTOMATION FOR SWING GATES

CARDIN TRADE
SERIES BL TAG

These electromechanical rams with 24Vdc motors suitable for small residential installations with two swing gate leaves or one pedestrian gate are easy to fit without requiring brickwork and offer excellent service with regard to the number of manoeuvres.

Available in two models, right and left fitting, both of which are self-locking in order to guarantee that the gate remains locked in the closed position.

The units do not feature on board electronics and we advise you to use the Cardin electronic programmer T624.

Gate positioning control is carried out via encoder with the help of mechanical travel limits and the self-programming system reduces installation times to a minimum and optimises the programming procedure.

Repositioning takes place automatically whenever foreign objects get in the way of the gate as it is moving.

The electronic control unit is completed by the anti-crush and “soft start” and “soft stop” functions.

In case of blackouts, emergency manoeuvring is guaranteed by a practical manual release system protected by a personalised key that is efficient under all working conditions.
### ELECTROMECHANICAL RAM WITH A 24V MOTOR

**SERIES BL TAGDX**

Self-locking encoder controlled ram, factory set for fitting to the right hand side of the installation. The geared motor locks the gate leaf in the closed position.

- ECU to be ordered separately T624.
- Standard version for gates max. length 2m, max. weight 150kg.

### ELECTROMECHANICAL RAM WITH A 24V MOTOR

**SERIES BL TAGSX**

Self-locking encoder controlled ram, factory set for fitting to the left hand side of the installation. The geared motor locks the gate leaf in the closed position.

- ECU to be ordered separately T624.
- Standard version for gates max. length 2m, max. weight 150kg.

---

**For the electric locks see page 163.**

### ELECTRONIC PROGRAMMER

For one or two 24V encoder-controlled motors complete with speed regulation (with ECU data exchange) and deceleration. Factory set for the insertion of an open collector receiver card.

**ORDER NUMBER**

- **T624**

### BATTERIES WITH SUPPORT BOX

Battery charger, two 12V 2Ah batteries with supports for fixing the batteries to the cover of the electronic programmer complete with wiring cable.

**ORDER NUMBER**

- **SPB24M**

### BATTERY CHARGER

For use with 24V programmers.

**ORDER NUMBER**

- **CB24**

### POWER SUPPLY KIT

Solar panels for use with all 24Vdc automation.

**ORDER NUMBER**

- **SUNPOWER**

---

Compatible with the data exchange system between digital devices (smartphone, tablet, etc.) and the Cardin multifunctional control units: See section 24V ECU INTERFACE DEVICES on page 186.
LIMITS OF USE BLTAG

<table>
<thead>
<tr>
<th>α°</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>C2</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>90</td>
<td>90</td>
<td>200</td>
<td>0</td>
<td>90</td>
<td>750</td>
</tr>
<tr>
<td>90</td>
<td>90-140</td>
<td>200</td>
<td>0 - 50</td>
<td>90</td>
<td>770</td>
</tr>
<tr>
<td>90</td>
<td>140-160</td>
<td>180</td>
<td>51 - 70</td>
<td>90</td>
<td>800</td>
</tr>
<tr>
<td>90</td>
<td>160-180</td>
<td>170</td>
<td>71 - 90</td>
<td>90</td>
<td>810</td>
</tr>
<tr>
<td>90</td>
<td>180-200</td>
<td>150</td>
<td>91-110</td>
<td>90</td>
<td>830</td>
</tr>
<tr>
<td>90</td>
<td>200-220</td>
<td>120</td>
<td>111-130</td>
<td>90</td>
<td>855</td>
</tr>
<tr>
<td>90</td>
<td>200-220</td>
<td>90</td>
<td>111-130</td>
<td>90</td>
<td>860</td>
</tr>
<tr>
<td>90</td>
<td>131-150</td>
<td>105</td>
<td>131-150</td>
<td>75</td>
<td>865</td>
</tr>
<tr>
<td>110</td>
<td>90</td>
<td>200</td>
<td>0</td>
<td>90</td>
<td>750</td>
</tr>
<tr>
<td>110</td>
<td>90-140</td>
<td>200</td>
<td>0 - 50</td>
<td>90</td>
<td>770</td>
</tr>
<tr>
<td>110</td>
<td>140-160</td>
<td>140</td>
<td>51 - 70</td>
<td>90</td>
<td>840</td>
</tr>
<tr>
<td>110</td>
<td>140-160</td>
<td>130</td>
<td>51 - 70</td>
<td>90</td>
<td>840</td>
</tr>
</tbody>
</table>

Note: for an optimised installation use the values highlighted in grey.
CARDIN TRADE
SERIES BL

RAM SPECIFICATIONS

<table>
<thead>
<tr>
<th>Parameter</th>
<th>BL TAGDX</th>
<th>BL TAGSX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor power supply Vdc</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Nominal electrical input A</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Power input W</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>Duty cycle %</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>Opening time 90° s</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Maximum opening angle °</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Maximum thrust N</td>
<td>1500</td>
<td>1500</td>
</tr>
<tr>
<td>Protection grade IP</td>
<td>44</td>
<td>44</td>
</tr>
</tbody>
</table>

INSTALLATION EXAMPLE

**1** Geared motor (left)
**2** Geared motor (right)
**3** Internal photocells
**4** External photocells
**5** Warning lights with aerial
**6** Mechanical selector switch
**7** Electric lock
**8** All pole circuit breaker
**9** Sun Power
**10** Mains cable 230Vac
**11** Channelling for Cardin connection cable CABPC10
**12** Channelling route for low voltage wires
**13** Electronic programmer
**14** Lateral protective photocells
**15** Solar panels
**16** Opening direction stop buffers

**Attention:** The drawing is purely indicative and is supplied as a working base from which to choose the Cardin electronic components making up the installation. This drawing therefore does not lay down any obligations regarding the execution of the installation.
HYDRAULIC WORM SCREW AUTOMATION FOR SWING GATES

CARDIN TRADE SERIES BL BLUES

These hydraulic rams with 230V motors, are easy to fit without requiring brickwork, offer excellent service with regard to the number of manoeuvres and are particularly suited for installations with columns of all dimensions.

The following models are available:
- self-locking; the geared motor locks the gate leaf in the closed position.
- reversible; an electric lock must be fitted to guarantee that the gate leaf locks in the closed position.

The units do not feature on board electronics and we advise you to use the Cardin electronic programmers T600.

Gate positioning is carried out with the help of mechanical travel limits. Safe and versatile thanks to the independent torque and speed adjustment together with hydraulic deceleration.

Constant performance over time and in any condition thanks to reduced wear&tear and the possibility to maintain the oil at the ideal temperature using HOT (optional).

In case of blackouts, emergency manoeuvring is guaranteed (in the self-locking versions) by a practical manual release system protected by a personalised key that is efficient under all working conditions.
HYDRAULIC RAM WITH A 230V MOTOR
Self-locking ram. The geared motor locks the gate leaf in the closed position.
ECU to be ordered separately T600.
Standard version for gates max. length 2.5m, max. weight 350kg.

HYDRAULIC RAM WITH A 230V MOTOR
Reversible ram. An electric lock must be fitted to guarantee that the gate leaf locks in the closed position.
ECU to be ordered separately T600.
Standard version for gates max. length 2.5m, max. weight 350kg.

HYDRAULIC RAM WITH A 230V MOTOR
Self-locking ram. The geared motor locks the gate leaf in the closed position.
ECU to be ordered separately T600.
Long version for gates max. length 4.5m, max. weight 500kg.

HYDRAULIC RAM WITH A 230V MOTOR
Reversible ram. An electric lock must be fitted to guarantee that the gate leaf locks in the closed position.
ECU to be ordered separately T600.
Long version for gates max. length 4.5m, max. weight 500kg.

Compatible with the data exchange system between digital devices (smartphone, tablet, etc.) and the Cardin multifunctional control units. See section 24V ECU INTERFACE DEVICES on page 186

For the electric locks see page 163.
BRACKETS
front and rear brackets in galvanised steel.

MECHANICAL GATE LOCK
for installations with two gates and a horizontal electric lock.

ELECTRONIC PROGRAMMER
for one or two 230V encoder-controlled motors complete with torque adjustment and deceleration. Factory set for the insertion of an open collector receiver card.

ELECTRONIC HEATER
with a temperature probe for 230V motors.

FLAGON OF OIL
5 litres.

LIMITS OF USE BL BLUES

Note: for an optimised installation use the values highlighted in grey.
### OPERATOR ARM TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th></th>
<th>BL BLUES3</th>
<th>BL BLUES3R</th>
<th>BL BLUES5</th>
<th>BL BLUE5R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor power supply</td>
<td>Vac 230</td>
<td>Vac 230</td>
<td>Vac 230</td>
<td>Vac 230</td>
</tr>
<tr>
<td>Nominal electrical input</td>
<td>A 1.2</td>
<td>A 1.2</td>
<td>A 1.2</td>
<td>A 1.2</td>
</tr>
<tr>
<td>Power input</td>
<td>W 280</td>
<td>W 280</td>
<td>W 280</td>
<td>W 280</td>
</tr>
<tr>
<td>Duty cycle</td>
<td>% 70</td>
<td>% 70</td>
<td>% 70</td>
<td>% 70</td>
</tr>
<tr>
<td>Opening time 90°</td>
<td>s 18</td>
<td>s 18</td>
<td>s 30</td>
<td>s 30</td>
</tr>
<tr>
<td>Maximum opening angle</td>
<td>° 105</td>
<td>° 105</td>
<td>° 105</td>
<td>° 105</td>
</tr>
<tr>
<td>Thrust</td>
<td>N 3000</td>
<td>N 3000</td>
<td>N 3000</td>
<td>N 3000</td>
</tr>
<tr>
<td>Protection grade</td>
<td>IP 56</td>
<td>IP 56</td>
<td>IP 56</td>
<td>IP 56</td>
</tr>
</tbody>
</table>

### OVERALL DIMENSIONS

**BL BLUES3 - BL BLUES3R** (1080 x 90 x 94)  

**BL BLUES5 - BL BLUE5R** (1320 x 90 x 94)

### INSTALLATION EXAMPLE

**LEGEND**

1. Geared motor (left)
2. Geared motor (right)
3. Internal photocells
4. External photocells
5. Warning lights with aerial
6. Mechanical selector switch
7. Electric lock
8. All pole circuit breaker
9. Mains cable 230Vac
10. Channelling for Cardin connection cable CABPC10
11. Channelling route for low voltage wires
12. Electronic programmer
13. Lateral protective photocells
14. Opening direction stop buffers

**Attention:** The drawing is purely indicative and is supplied as a working base from which to choose the Cardin electronic components making up the installation. This drawing therefore does not lay down any obligations regarding the execution of the installation.
COMPLETE KIT FOR SWING GATES

USE
Worm screw automation for gates with a maximum length of 2.5m, maximum weight 200kg.

2 SELF-LOCKING ELECTROMECHANICAL RAMS
with a 24V encoder-controlled motor.

ELECTRONIC PROGRAMMER
with a 433MHz FM receiver, battery charger and NiMH batteries, housed in an IP55 box with sealing gaskets and cable gland entry holes for the insertion of one Ø21 mm and two Ø16mm rigid tubes. See page 172.

2 4-CHANNEL TRANSMITTERS
433MHz FM ROLLING CODE.

PAIR OF PHOTOCELLS
in class 3 with adjustable lens, range 10m.

LED WARNING LIGHT
24V - 230V with an in-built aerial.

10-METRE WIRING CABLE
with end sleeves.

INTERNATIONAL WARNING SIGN
in PP, multi-language.

PACKING
DIMENSIONS: 920 x 190 x 280
GROSS WEIGHT: 20 kg
ITEMS PER PALLET: 9 pcs
COMPLETE KIT FOR SWING GATES

USE
Worm screw automation for gates with a maximum length of 3m, maximum weight 250kg.

2 SELF-LOCKING ELECTROMECHANICAL RAMS
with a 24V encoder-controlled motor and mechanical travel limits.

ELECTRONIC PROGRAMMER
for two 24V encoder-controlled motors complete with speed regulation and deceleration.

2-CHANNEL RECEIVER CARD
433MHz open collector, slot-in card.
S504 - S508 - S486 - FM - EDGE and NOIRE versions are available on request.

2 CHANNEL TRANSMITTERS
433MHz FM ROLLING CODE.

PAIR OF SURFACE-MOUNT PHOTOELECTRIC CELLS
with adjustable lens, range 25m.

LED WARNING LIGHT
24V - 230V with an in-built aerial

INTERNATIONAL WARNING SIGN
in PP, multi-language.

PACKING
DIMENSIONS: 920 x 190 x 280
GROSS WEIGHT: 24 kg
ITEMS PER PALLET: 9 pcs

KT-BLASY324

24V
3m max
250 kg
BL ASY324

T624

RSQ504C2

TXQ504C4

VEDO 180

ICON

TARGA-INT
COMPLETE KIT FOR SWING GATES

USE
Worm screw automation for gates with a maximum length of 3m, maximum weight 250kg.

2 SELF-LOCKING ELECTROMECHANICAL RAMS
with a 230V encoder-controlled motor and mechanical travel limits.

ELECTRONIC PROGRAMMER
for two 230V encoder-controlled motors complete with speed regulation and deceleration.

2-CHANNEL RECEIVER CARD
433MHz open collector, slot-in card.
SS04 - SS08 - S466 - FM - EDGE and NOIRE versions are available on request.

2 4-CHANNEL TRANSMITTERS
433MHz FM ROLLING CODE.

PAIR OF SURFACE-MOUNT PHOTOELECTRIC CELLS
with adjustable lens, range 25m.

LED WARNING LIGHT
24V - 230V with an in-built aerial

INTERNATIONAL WARNING SIGN
in PP, multi-language.
COMPLETE KIT FOR SWING GATES

USE
Worm screw automation for gates with a maximum length of 2m, maximum weight 150kg.

2 SELF-LOCKING ELECTROMECHANICAL RAMS
with a 24V encoder-controlled motor.

ELECTRONIC PROGRAMMER
for two 24V encoder-controlled motors complete with speed regulation and deceleration.

2-CHANNEL RECEIVER CARD
433MHz open collector, slot-in card.
S504 - S508 - S486 - FM - EDGE and NOIRE versions are available on request.

2 4-CHANNEL TRANSMITTERS
433MHz FM ROLLING CODE.

PAIR OF SURFACE-MOUNT PHOTOELECTRIC CELLS
with adjustable lens, range 25m.

LED WARNING LIGHT
24V - 230V with an in-built aerial

INTERNATIONAL WARNING SIGN
in PP, multi-language.

PACKING
DIMENSIONS: 720 x 260 x 330
GROSS WEIGHT: 12.5 kg
ITEMS PER PALLET: 16 pcs