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# **Ditec CIVIK**

#### IP2319EN • 2019-03-15 Technical Manual

Assembly, Installation and Maintenance handbook for internal sliding door

(Translation of original instructions)

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### Index

ΕN

Subject	Page
1. General safety precautions	3
2. Declaration of incorporation of partly completed machinery	4
3. Technical specifications	5
3.1 Operating instructions	5
4. Standard installation	6
5. Assembling	7
5.1 Assembling procedure	7
5.2 Belt assembling procedure	11
6. Installation	12
6.1 Housing fastening	12
6.2 Preparation of wood door wing	13
6.3 Preparation of glass door wing	14
6.4 Door wing adjustment	15
6.5 Belt adjustment	15
6.6 Floor guide installation	15
6.7 Fastening door wing locking device CIVIKLA	16
6.8 Fastening of the radio receiver OCL	16
6.9 Installation of functions selector switch COMGC	16
7. Installation on disappearing doors (KCIVIKC1TP)	17
8. DOITCV16 - DOITCV22 glass door wing attachment	18
8.1 Preparing the glass door wing	18
8.2 Installing the floor guide	18
9. Electrical connections	19
9.1 Commands	19
9.2 Output and accessories	19
9.3 Adjustment	20
10. Requisites for doors for Low Energy use	21
11. Connection examples	22
12. Starting	23
13. Routine maintenance plan	23

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### 1. General safety precautions



Failure to respect the information given in this manual may cause personal injury or damage to the device. Keep these instructions for future reference

This assembly and installation manual is intended exclusively for the use of qualified personnel. Installation, electrical connections and adjustments must be performed by qualified personnel, in accordance with Good Working Methods and in compliance with the current regulations. Read the instructions carefully before installing the product.

Incorrect installation could be dangerous.

The packaging materials (plastic, polystyrene, etc.) should not be discarded in the environment or left within reach of children, as they are a potential source of danger.

Before installing the product, make sure it is in perfect condition.

Do not install the product in explosive areas and atmospheres: the presence of inflammable gas or fumes represents a serious safety hazard.

Before installing the motorisation device, make all the necessary structural modifications to create safety clearance and to guard or isolate all the crushing, shearing, trapping and general hazardous areas.

Make sure the existing structure is up to standard in terms of strength and stability. The motorisation device manufacturer is not responsible for failure to observe Good Working Methods when building the frames to be motorised, or for any deformations during use.

The safety devices (photocells, safety edges, emergency stops, etc.) must be installed taking into account the applicable laws and directives, Good Working Methods, installation premises, system operating logic and the forces developed by the motorised door or gate.

The safety devices must protect against crushing, cutting, trapping and general danger areas of the motorised door or gate.

Display the signs required by law to identify hazardous areas.

Each installation must bear a visible indication of the data identifying the motorised door or gate. When necessary, connect the motorised door or gate to an effective earthing system that complies with the current safety standards.

During installation, maintenance and repair operations, cut off the power supply before opening the cover to access the electrical parts.

The automation protection casing must be removed by qualified personnel only.

The electronic parts must be handled using earthed antistatic conductive arms. The manufacturer of the motorisation device declines all responsibility if component parts not compatible with safe and correct operation are fitted.

Only use original spare parts when repairing or replacing products.

The installer must supply all information concerning the automatic, manual and emergency operation of the motorised door or gate, and must provide the user with the operating instructions.

# 2. Declaration of incorporation of partly completed machinery

We: Entrematic Group AB Lodjursgatan 10 SE-261 44 Landskrona Sweden

declare under our responsibility that the following types of equipment:

Ditec CIVIK, Ditec OLLY C

comply with the following directives:

2014/30/EUElectromagnetic Compatibility Directive (EMCD)2006/42/ECMachinery Directive (MD) for the following essential health and safety requirements:1.1.2, 1.2.1, 1.2.2, 1.2.3, 1.2.4.2, 1.2.6, 1.3.9, 1.4.3, 1.7.2, 1.7.4, 1.7.4.1, 1.7.4.2

Technical documentation for safe integration supplied.

Harmonised European standards which have been applied:

EN 60335 -1:2012+A11:2014	EN ISO 13849 -1:2015	EN 61000-6-1:2007
EN 60335-2-103:2015	EN 16005:2012/AC:2015	EN 61000 -6-3:2007+A1:2011
EN 61000-3-3:2013	EN 61000-3-2:2014	

The production process aims to guarantee that the equipment complies with the technical documentation.

The equipment must not be put into service until the final door system installed has been declared compliant with the Machinery Directive 2006/42/EC by the installer.

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Place Date Landskrona 2019-02-21

Signature Marrieo Fino

Position Entrance Automation President

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### 3. Technical details

	CIVIK 1 WING	CIVIK 2 WINGS
Power supply	230 V~ / 50-60 Hz	230 V~ / 50-60 Hz
Absorption	0,2 A	0,2 A
Accessories power supply	24 V= / 0,36 A	24 V= / 0,36 A
Thrust	30 N	30 N
Opening speed*	0,4 m/s	0,8 m/s
Closing speed	0,2 m/s	0,4 m/s
Intermittence	S2=20 min S3=30%	S2=20 min S3=30%
Max door weight	60 kg	2 x 40 kg
Temperature	-20° C / +55° C	-20° C / +55° C
Degree of protection	IP20	IP20

\* The maximum door wing speed varies according to the door wing weight if the LOW ENERGY service is used (see chap. 10).

#### 3.1 Operating instructions

Applications: INTENSE. Ditec Civik is the ideal solution for all residential and commercial environments such as offices and studios.



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### 4. Standard installation



REF.	CODE	DESCRIPTION	REF.	CODE	DESCRIPTION
А		Power supply	13	KXL037K	Belt 20 m
1	DOITCVK22P	Operator	14	V3760N66	Housing
1	DOITCVK33P	operator	15	VSP25V25	Seal brush 2,5 m
2	COMGTC	Wireless functions selector	16	V3759N66	Carter
		switch (ref. COMGC)	17	RGR3511	Gasket 40 m
3	PASS024AS(W)	Combined opening and safe	18		Anti-panic lock
		closing sensor	19	CIVIKLA	Lock hook-up bracket
4	PAS005AP	Safe opening sensor	20	OCL	Radio receiver
5		Push-button	21	CIVIKAL	Wood door attachment
6		Control and drive unit	22	CIVIKAC	Glass door attachment
7		Belt transmission unit	23	0KP515AB	Sliding guide (10 piece)
8		Belt attachment bracket	24	0KP369	Sliding guide for glass wing
9	KCIVIK1P	Carrier unit			(10 piece)
10		Rabbed lock	26	KCIVIKGCL	Second door unit
11		Wire bracket	27	COMGRC	Wireless functions selector
12		Housing heads			switch receiver (ref. COMGC)
			28	COMGS	Optional display

### 5. Assembling



#### 5.1 Assembling procedure

The supply modes for the CIVIK automations are as follows:

1. kit of components to be assembled;

2. automations assembled on a door wing in three different lengths.

To assemble the components kits, to reduce the standard LT dimensions, or to carry out an automation for two door wings, proceed as follows.

- Cut the box and the casing as indicated in figure.

NOTE: remove any cut residues from the aluminium, and clean the carriage slide guides in particular.

- Assemble the necessary components as follows:

CIVIK 2 door wings, see page 8;

CIVIK 1 door wing with opening to the right, see page 9;

CIVIK 1 door wing with opening to the left, see page 10.

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### CIVIK 2

CODE	<b>LT</b> PL + 2LM + 20	LM	PL	A	В	С	D
DOITCVK22P + KCIVIKGCL	2200	(DL, 2C) / 2	LT 2LM 20	150	400	700	80
DOITCVK33P + KCIVIKGCL	3300	(FL + 25) / 2	LI - ZLIM - ZU	400	650	1000	80



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CODE	<b>LT</b> PL + LM + 20 + S	LM	PL	Α	В	С	D
DOITCVK22P	2200			500	70	850	350
DOITCVK33P	3300	PL + 25	LI - LM - 20 - 5	1000	70	1350	900



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### CIVIK 1 SX

CODE	LT	LM	PL	Α	В	С	D
	PL + LM + 20 + S						
DOITCVK22P	2200	PL + 2S	IT IM 20 C	500	70	1050	350
DOITCVK33P	3300		LI - LIVI - 20 - 3	1000	70	1600	900



#### 5.2 Belt assembling procedure



- Insert the belt in the motor, rotating the pin [A] as indicated in the figure.
- Join the belt in line with the belt attachment bracket, as indicated in the figure (on the right of the belt attachment pulling unit [26]]. Cut any excess.
- Tighten the belt correctly, moving the belt transmission [7] to the left.
- Tighten all screws and secure the heads to the box.

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### 6. Installation

### 6.1 Housing fastening

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#### General tips / Safety concerns

Ensure that entrapment between the driven part and the surrounding fixed parts due to the opening movement of the driven part is avoided. The following distances are considered sufficient to avoid entrapments for the parts of the body identified;

- for fingers, a distance greater than 25 mm or less than 8 mm
- for feet, a distance greater than 50 mm
- for heads, a distance greater than 300 mm
- and for the whole body, a distance greater than 500 mm.
- If these distances can not be met, protection is necessary.
- Danger points shall be safeguarded up to a height of 2.5 m from the floor level.
- The operator shall not be used with a doorset incorporating a wicket door.
- The electrical switch must be positioned in the direct view of the driven part but away from the moving parts. Unless operated by a key, it must be installed at a minimum height of 1.5 m and not accessible to the public.



Unless otherwise specified, all measurements are expressed in millimetres (mm).

- Figures show the fastening of the housing in accordance with the height of the wing:
- Fasten the housing by means of steel blocks M6 Ø12 or screws 6MA (not provided by us).
- Verify if housing rear side is perpendicular to the floor and not lengthwise deformed by the shape of wall. Should the wall not be straight and smooth, iron plates shall be arranged on it prior to guide fastening.

 $\sqrt{}$  WARNING: the housing must be attached securely to the wall to support the weight of the wings.

#### 6.2 Wood door wing preparation



The door must be robustly constructed.

Fix the door wing attachment bracket on the door wing, and fix the latter to the carriage, as indicated in figure.

It is advisable to install rubber borders at the ends of the wing to reduce force of impact.

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#### 6.3 Glass door wing preparation



The glass fitting section may be used with glass-only wings of 10 or 12 mm thickness. It is not usable on any kind of normal or stratified glass.

Carry out the operations indicated in figure.

We recommend to apply a light layer of silicone between the glass corner and the end of the profile.

WARNING: in closing position for all-glass wings, without gaskets, leave at least 10 mm. to avoid contact between glass wings.

#### 6.4 Door wing adjustment



It is possible to adjust the vertical position of the door wing, as shown in the figure. Loosen the screws [A] and adjust height with screw [B].

Check, by moving the wing by hand, that it moves freely and without friction and that all the wheels bear on the guide.

#### 6.5 Belt tightness

- Tighten the belt correctly, moving the belt transmission [7] to the left.

WARNING: a wrong adjustment can prevent the automation from working properly.

#### 6.6 Guides at floor installation



For guides at floor use only antifriction materials such as PVC, NYLON, TEFLON. It is preferable that the length of the guide should not be greater than the overlap between the mobile and fixed wing, and that it not enter the passage space.

The guide slide on the floor must be smooth for the entire length of the wing.

[23] Guide for framed door supplied by us: cut to required.

[24] Guide for glass door supplied by us.

#### 6.7 Fastening door wing locking device CIVIKLA

The door wing locking device can be fitted to keep the door closed. The automation automatically recognises the locking device and acts properly.

- Fix the door wing locking device [18] inside the box, using the screws supplied on the basis of the type of automation chosen.
- Place the door wing in the closure position.
- Fix the lock hook-up bracket [19] to the carriage, as indicated on page 8, 9 and 10.
- Check that, with the door closed, the lock is resting correctly on the lock hook-up bracket, preventing the door from sliding.
- Make the electrical connections as shown in chapter 9.

### 6.8 Fastening of the radio receiver OCL

It is possible to install the radio receiver that allows the door to be activated by means of wireless commands.

- Fasten the radio receiver [20] inside the box by means of the supplied screws.
- Carry out the electrical connections as shown in the related manual.
- Memorise the transmitters as shown in the related manual.

#### 6.9 Installation of COMGC functions selector switch

The radio selector which allows you to select door functions can be installed using wireless commands:

- Fasten the COMGRC receiver [27] inside the box using the supplied screws.
- Carry out the electrical connections as described in the relevant manual.
- Memorise the COMGTC transmitter [2] as described in the relevant manual.

### 7. Installation on disappearing doors (KCIVIKC1TP)

It is possible to install the CIVIK automation on disappearing doors. By means of the pulling unit [29], the door wing is connected to the automation belt.



### EXAMPLE

LT	LM	PL	А	В	С	D
1600	PL + 2S	1000 max	240	20	80	20



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### 8. DOITCV16P - DOITCV22P Glass door wing attachment



Figure shows the installation measurements for a CIVIK automation made with glass door wings.

#### 8.1 Preparing the glass door wing

Use only glass with a thickness of 10 mm (not supplied by us).

To create an automation with two moving door wings, use the KCVGCL kit for the second moving door wing.

WARNING: in closing position for all-glass door wings, without gaskets, leave at least 10 mm to avoid contact between glass door wings.

#### 8.2 Installing the floor guide

Fasten the guide to the floor, as shown in figure.

The length of the floor guide should not be greater than the overlap between the fixed and mobile door wings, and must not enter the passage space.

### 9. Electrical connections



-Max section of the wire that can be used on a single clamp = 1.3 mm <sup>2</sup> (26AWG). -If used wires with a larger diameter or more wires, make an external connection using a special terminal (not supplied).

#### 9.1 Commands

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Comman	d	Function	Description
13	N.0.	OPENING	The opening manoeuvre starts when the contact is closed.
14	N.O.	CLOSING	The closing manoeuvre starts when the contact is closed.
1 3 1 4	N.O.	STOP	The coincidence of an opening and closing command stops all move- ments. WARNING: when the contact opens again the door proceeds with the interrupted manoeuvre.
16	N.C.	OPENING SAFETY CONTACT	The opening of the contact causes the opening speed to decrease in the last 500 mm of stroke of the door wing. NB: If no opening safety device is used and DIP3= ON, a jumper must be made on contacts 41-6.
18	N.C.	CLOSING SAFETY CONTACT	The opening of the contact reverses the movement (re-opening) du- ring the closing operation. NB: If no closing safety device is used and DIP3= ON, a jumper must be made on contacts 41-8.
41 ← [+] 0 [-]	N.C.	SAFETY DEVICES TEST	Terminal 41 activates a test of the safety device on each cycle. If the test fails the RED LED flashes briefly and the test is repeated. With DIP3=0N connect terminal 41 and 0 of the control panel to the corresponding test terminals on the safety device. If the safety devices are not tested, see description DIP3=0FF.

#### 9.2 Output and accessories

Output	Value - Accessories	Description
0 1	24 V <del></del> 0,36 A	Accessories power supply. Power supply output for external accessories.
1 BL + -	<b>CIVIKLA</b> 24 V <b></b> 0,5 A	Lock device. Lock is only activated when the door is closed. NOTE: the door is released in the event of power failure and can be manually operated.

#### 9.3 Adjustments

#### TRIMMER/DIP SWITCHES ADJUSTMENT ENABLING PROCEDURE

The trimmers and DIPs affect the force limiting safety function. They must be set as instructed, (if not, the modifications will not be accepted and the RED and GREEN LEDs will flash):

- During the setting phase, the operator stops and it is not possible to carry out commands.
- Press the button for 4 s (RED and GREEN LEDs on);
- Adjust the trimmers and DIP switches within the 5-minute time limit;
- To complete the procedure, press the button for 2 s, the operator continues the previously interrupted operation

	Description	OFF	ON 🖥
DIP1	<b>Closure thrust.</b> Maintain the door wing in the closure position.	Disabled.	Enabled.
DIP2	<b>Direction selection.</b> The opening direction is intended by viewing the automation from the side being examined.	Righthand opening. Automation with 2 door wings	Lefthand opening.
DIP3	Safety test terminal 41	Disabled The safety sensors are not monitored and the NC contacts must be connected to terminals 1-6 and 1-8.	Enabled.

	Description	OFF	ON 🖥
DIP "WEIGHT"	Select wing weight for LOW ENERGY use	See chapter 10	See chapter 10



Automatic closing time. From 0 to 30 s.

Adjust the time that passes between the end of the opening operation and the start of the automatic closing operation.

The count is reset when an opening command is given with the door open. Adjust the TC to the maximum if automatic closing is not required.



#### Opening

Press quickly to activate the opening operation

ENABLING of trimmer/dip switches adjustment

(red+green LEDs on, see enabling procedure)

LED	On	Flashing light
Green 💳	Power supply on	Encoder not working or automation faulty.
Red 💻	Safety contacts 6 or 8 open.	Safety test failure.
Red + Green	Trimmer/dip switches adjustment proce- dure enabling	<ul> <li>2 flashes = trimmer/dip switches adjustment confirmed</li> <li>4 flashes at 1s intervals, indicates that an adjustment has been made without first enabling the adjustment procedure:perform the enabling procedure again.</li> </ul>
Red / Green		<b>alternately flashing light</b> the automation is stopped due to coincid- ing opening and closing commands

### 10. Requisites for doors for Low Energy use

The CIVIK automation is factory supplied with maximum performance setting. If used with the Low Energy service, the "Weight" dip switches must be selected according to the weight of the door wing, as shown in the following table.

NB: consider the weight of a single door wing.

Attention: an incorrect setting of the dip with respect to the weight of the door leads to an incorrect speed and consequent operation inconsistent with Low Energy use.

DIP "WEIGHT"		HT"			
DIP1	DIP2	DIP3	Weight of a door wing	Opening speed	Performance
off	off	OFF	Up to a max 60 kg (1 door) or 2 x 40 kg (2 doors)	0,40 m/s	Maximum performance, NO Low Energy
on 🛙	OFF	OFF	Up to 25 Kg	0,36 m/s	
off	on 🛛	OFF	From 26 $ ightarrow$ 30 kg	0,34 m/s	
on 🛙	on 🛛	OFF	From 31 $\rightarrow$ 35 kg	0,31 m/s	
off	OFF	on 🛙	From 36 $ ightarrow$ 40 kg	0,29 m/s	Low energy performance
on 🛙	OFF	on 🛙	From 41 $\rightarrow$ 45 kg	0,27 m/s	
OFF	on 🛙	on 🖪	From 46 $ ightarrow$ 50 kg	0,26 m/s	
on 🛙	on 🔳	on 🛙	From 51 $\rightarrow$ 60 kg	0,24 m/s	

DN 1 2 3 Weight DIP "WEIGHT"			
DIP1 DIP2 DIP3	Weight of a door wing	Closing speed	Performance
Any configuration	Up to a max 60 kg (1 door) or 2 x 40 kg (2 doors)	0,20 m/s	Low Energy performance

### 11. Connection examples



11.1 No safety sensor



DIP3=0N

11.2 Opening and safety sensors (1 and 2)





11.3 Combination of opening and safety sensors (1 and 2) + opening safety sensors (3 and 4)



### 12. Start-up

- Connect the accessories;
- Make a jumper on the safety contacts 41-8 and 41-6 on the control panel if not used;
- Reconnect the mains power supply to the automation;
- Enable the trimmer/dip switches adjustment (See paragraph 9.3);
- Select dips 1, 2, 3 and the trimmer TC based on the desired operation (See paragraph 9.3);
- Select dip "weight " 1, 2, 3 based on the wing weight if you want to use the automation with LOW ENERGY performance (see paragraph 10).

WARNING: the control panel performs an automatic RESET on each start and the first opening or closing manoeuvre is performed at low speed allowing the automatic self-learning of the stop positions (acquisition).

- Check that the door is operating correctly with a further opening command.
- Check the operation of the connected accessories.
- If the automation encounters an obstacle during closure, it is detected and the automation opens again. - If the automation encounters an obstacle during opening, it is detected and the automation stops. If the obstacle is detected three times consecutively, it is considered as the new stop until it is removed.
- The automation is equipped with the Push&Go/Pull&Close function. The motorised opening or closing operation is activated when the door is pushed.



If the automation is not powered, it is possible to slide the doors manually but only by moving them slowly.

### 13. Routine maintenance plan

Perform the following operations and checks every 6 months, according to the intensity of use of the automation.

Without 230 V~ power:

- Clean the moving parts (the carriage guides).
- Check the belt tension.
- Clean the opening and closing sensors (if present).
- Check the stability of the automatic system and make sure that all screws are correctly tightened.
- Check the alignment of the door wing and the stop position.

Turn on the 230 V~ power:

- Check the stability of the door, and make sure it moves smoothly.
- Check that all control functions are operating correctly.
- Make sure the opening and closing sensors are working correctly (if present).
- Make sure the installation complies with the current regulations and the essential requisites laid down by the relevant authorities.



Only use original spare parts for repairing or replacing products.



The installer must supply all information concerning the automatic, manual and emergency operation of the motorised automation or gate, and must provide the user with the operating instructions.

The installer must prepare and keep a maintenance record showing all the routine and extraordinary maintenance work carried out.

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