

Comptec

CDD6

Comptec Door Drive 6

Lift door controller

QUICK REFERENCE

Note: the complete user manual can be downloaded from the website
www.compteelectronics.com



EN



PRJ1166_01_07_03_01_00_QR

rev.04

Reference Codes and Standards

All the references to the Standards and Codes are reported in the user manual.

Door Drive Data

Supply Voltage	[100 ; 240]Vac 1-ph 50-60Hz, (115V – 20%, 230V + 30%)	Vac
Available Peak Output Power	300	VA
Nominal Output Power	200	VA
Operating temperature	[-10; +60]	°C
Humidity	[20;80] non condensing	%
Electrical Protection	Fuse [5x20, 4A] fast on the main power supply line Fuse [5x20, 8A] on battery power line	-
Environmental Protection	IP-54 case	-

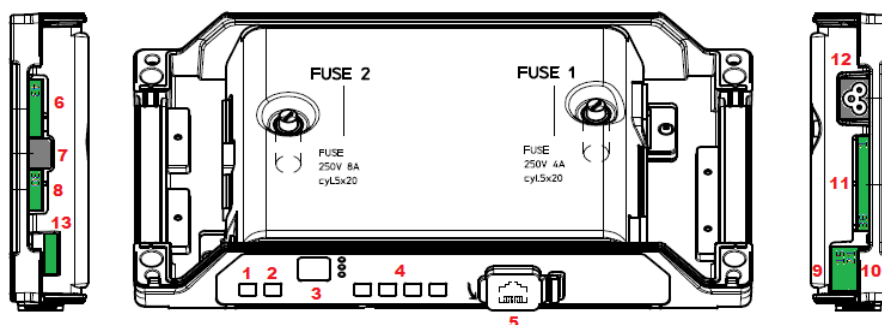
Installation

The installation of the drive has to be performed by expert technical personnel, having all the professional requirements expected, based on the active law in the installation country. Before proceeding with the installation of the device, please verify the necessary safety equipment; check also the necessary instrument to execute all the installation operations. Be sure to work in safe conditions, taking the complete system in inspection mode before starting any activity.

The CDD6 device works inside the complete car door operator, consisting of:

- Mechanical Door Operator: panels, carriages, belt, motor.
- Door drive (the CDD6)
- Parallel or CAN bus interface to the main lift controller

Below it is represented the Device Connection Scheme:



The door controller has:

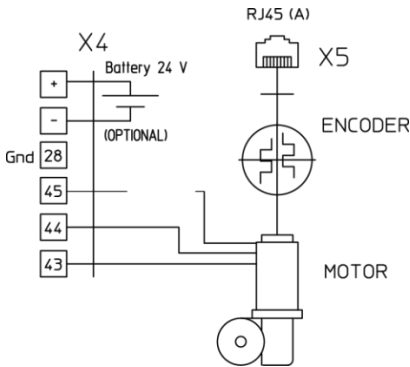
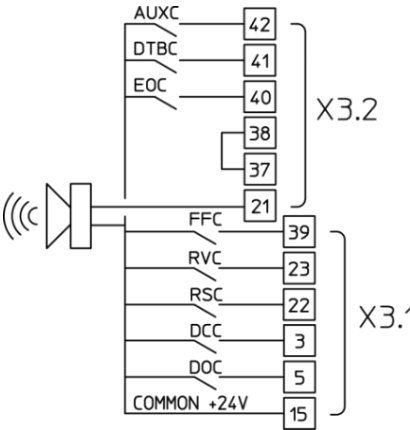
N°	ID	Description
1	ON	Power on button
2	OFF	Power off button
3	Display	7-segments (2 digits) for the visualization of the door drive status or programming
4	"1" "2" "3" "4"	Functional buttons for visualization/movement/programming
5	X8	external device connection for diagnostic, configuration and upgrade
6	X4	Motor and battery connector
7	X5	RJ45 Motor encoder connector
8	X9	Direct connection for light curtains, including 24Vdc power supply
9	X3.1	Connection of the commands from main lift controller
10	X3.2	Connection of the local contacts installed on the car
11	X2	Connection of the outputs to the main lift controller
12	X1	Connection of the main power supply
13	X10	CAN bus connector

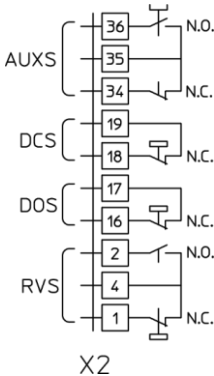
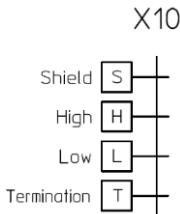
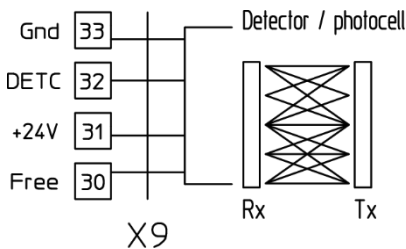
Please refer to the self-explicative cover sticker for the connection details.

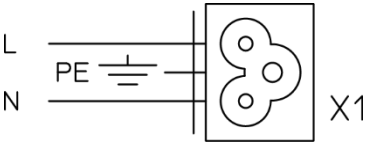
Check of Electrical parts

Verify the presence of the correct supply voltage, as reported in the technical specifications.

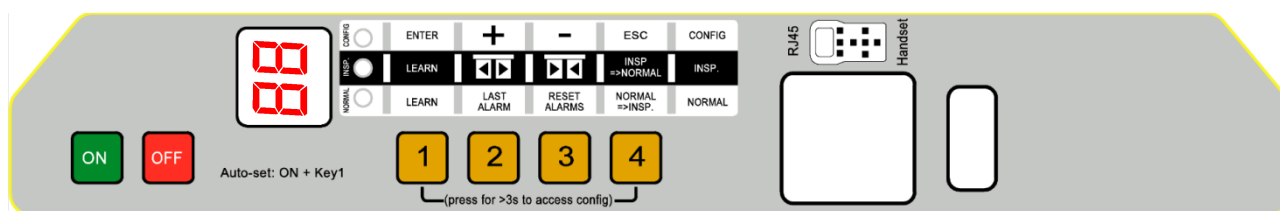
Once the mechanical installation of the CDD6 drive is completed, proceed as reported below.

Step	Operation	Description																																																
0	Preliminary checks	Press OFF button on the door drive front panel. Be sure that no power supply is present.																																																
1	Motor Connections 	1. Connect the motor cable to the pins of the X4 connector: <table><thead><tr><th>PIN</th><th>DC motors</th><th>Brushless motors</th></tr></thead><tbody><tr><td>43</td><td>Positive (Brown)</td><td>phase A (Blue or Red or 1)</td></tr><tr><td>44</td><td>Negative (White)</td><td>phase B (Black or 2)</td></tr><tr><td>45</td><td>-</td><td>phase C (Brown or 3)</td></tr><tr><td>28</td><td>Shield</td><td>Shield</td></tr></tbody></table> Keep in any case the previous connection order, in case no numbering rings are present, or in case the wires color is different from the one described. 2.If present, connect the encoder cable with its RJ45 male to the X5 connector. 3.If present, connect the external battery kit to the positive (+) and negative (-) pins of the X4 connector.	PIN	DC motors	Brushless motors	43	Positive (Brown)	phase A (Blue or Red or 1)	44	Negative (White)	phase B (Black or 2)	45	-	phase C (Brown or 3)	28	Shield	Shield																																	
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2	MLC interface connection 	In case of replacement of different controllers with different plugs proceed as following reported, otherwise plug the previous connectors as they are. Check the common voltage used, and the used contacts: <table><thead><tr><th>Common</th><th>Connections</th></tr></thead><tbody><tr><td>Internal 24V_DD (CDD6)</td><td>Check the presence of the 37-38 bridge as GND reference</td></tr><tr><td>External 24V_EC (MLC – Main Lift Controller)</td><td>Remove the 37-38 bridge, only in case there are no local contact installed on the car roof</td></tr></tbody></table> For further information please refer to the door drive manual. Connection of the MLC commands and of the local contacts: For encoder applications <table><thead><tr><th>PIN</th><th>Name</th><th>X3.1 Pin Description</th></tr></thead><tbody><tr><td>15</td><td>24V</td><td>Common 24V, available for MLC commands</td></tr><tr><td>5</td><td>DOC</td><td>Opening command</td></tr><tr><td>3</td><td>DCC</td><td>Closing command</td></tr><tr><td>22</td><td>RSC</td><td>Reduced speed command</td></tr><tr><td>23</td><td>RVC</td><td>Reversing command from detector</td></tr><tr><td>39</td><td>FFC</td><td>Fire-Fighting mode enable input</td></tr></tbody></table> <table><thead><tr><th>PIN</th><th>Name</th><th>X3.2 Pin Description</th></tr></thead><tbody><tr><td>42</td><td>AUXC</td><td>Programmable Auxiliary input</td></tr><tr><td>41</td><td>DTBC</td><td>Second TB management input</td></tr><tr><td>40</td><td>EOC</td><td>Battery Evacuation floor input</td></tr><tr><td>38</td><td>OV_IN</td><td>GND input for the photo-coupled inputs</td></tr><tr><td>37</td><td>OV_DD</td><td>Auxiliary GND of the door drive for the inputs</td></tr><tr><td>21</td><td>BUZS</td><td>Contact for Acoustic signal</td></tr></tbody></table>	Common	Connections	Internal 24V_DD (CDD6)	Check the presence of the 37-38 bridge as GND reference	External 24V_EC (MLC – Main Lift Controller)	Remove the 37-38 bridge, only in case there are no local contact installed on the car roof	PIN	Name	X3.1 Pin Description	15	24V	Common 24V, available for MLC commands	5	DOC	Opening command	3	DCC	Closing command	22	RSC	Reduced speed command	23	RVC	Reversing command from detector	39	FFC	Fire-Fighting mode enable input	PIN	Name	X3.2 Pin Description	42	AUXC	Programmable Auxiliary input	41	DTBC	Second TB management input	40	EOC	Battery Evacuation floor input	38	OV_IN	GND input for the photo-coupled inputs	37	OV_DD	Auxiliary GND of the door drive for the inputs	21	BUZS	Contact for Acoustic signal
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3	Outputs connection 	<table><tr><th>PIN</th><th>Name</th><th>X2 Pin Description</th></tr><tr><td>1, 4, 2</td><td>Rev.</td><td>Reversal relay</td></tr><tr><td>16, 17</td><td>Open</td><td>Door open relay</td></tr><tr><td>18, 19</td><td>Close</td><td>Door closed relay</td></tr><tr><td>34,35,36</td><td>AUX</td><td>Auxiliary (Alarm signal by default)</td></tr></table> Please Note: By default, open/closed door relays are N.C. (they open in the final position). The behavior logic can be changed in the settings P-76 (door relay closed), P-77 (door relay open). When door drive is not powered, the contacts are always closed.	PIN	Name	X2 Pin Description	1, 4, 2	Rev.	Reversal relay	16, 17	Open	Door open relay	18, 19	Close	Door closed relay	34,35,36	AUX	Auxiliary (Alarm signal by default)																											
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4	Wifi connection 	<table><tr><th>PIN</th><th>X10 Pin Description</th></tr><tr><td>T</td><td>Termination (connect bridge from T and L)</td></tr><tr><td>L</td><td>CAN BUS Low signal</td></tr><tr><td>H</td><td>CAN BUS High signal</td></tr><tr><td>S</td><td>Shield (GND)</td></tr></table>	PIN	X10 Pin Description	T	Termination (connect bridge from T and L)	L	CAN BUS Low signal	H	CAN BUS High signal	S	Shield (GND)																																
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5		Connect the Light curtain (if present) <table><tr><th>PIN</th><th>X9 Pin Description</th></tr><tr><td>30</td><td>Not connected - to help common wire connections</td></tr><tr><td>31</td><td>+24VDC maximum 100mA</td></tr><tr><td>32</td><td>Input pin: connect the status pin of the PNP NO or NC detector (P-31 Logic)</td></tr><tr><td>33</td><td>0V</td></tr></table>	PIN	X9 Pin Description	30	Not connected - to help common wire connections	31	+24VDC maximum 100mA	32	Input pin: connect the status pin of the PNP NO or NC detector (P-31 Logic)	33	0V																																
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6	Power supply connection 	Nominal Supply Voltage: [100 – 240] Vac [50-60] Hz, single phase Range: [115-20%, 230+30%] Vac
7	Final Checks	Verify that required signals are connected, then apply the cover. For further information please refer to the user manual.

HMI user interface



MODE		NORMAL	INSPECTION	CONFIGURATION
Description		Normal mode (automatic): the door drive executes the commands from MLC	Inspection mode (manual): the door drive executes commands from the panels keys	Configuration mode: parameters programming
LEDS	NORMAL	ON	OFF	OFF
	INSP	OFF	ON	OFF
	CONFIG	OFF	OFF	ON
KEYS	1	Key 1 and key 4 pressed together per t>3s: Configuration mode access While kept pressed (t > 3 s): displays the installed firmware version r1.r2.r3		Enter Access to parameter value OR Parameter value saving and return to parameters list
	2	Pressed and keep pressed (t>3s): Last alarm code showed ("no AL" if no alarm present)	Door opening Pressed and keep pressed (t>5s) together key 3: enable or disable Motor torque	+ Increase Parameter index, OR Increase Parameter value
	3	Keep pressed for t>3s: reset of the last alarm codes ("no AL")	Door closing Pressed and keep pressed (t>5s) together key 2: enable or disable Motor torque	- Decrease Parameter index, OR Decrease Parameter value
	4	Access to Inspection mode (if only key 4 pressed for t>1s) Access to Configuration mode (if Key 1 and key 4 pressed together for t>3s)	Return to Normal mode	ESC Exit from parameter selection OR Exit from Configuration mode and return to Normal mode
DISPLAY		Door drive status showed: "- -", "OP", "CL", "IM", "AL", ..	Door drive status showed: "- -", "OP", "CL", "IM", "AL", ..	Parameter list: "P" alternate to the parameter index. Parameter modification: parameter value showed

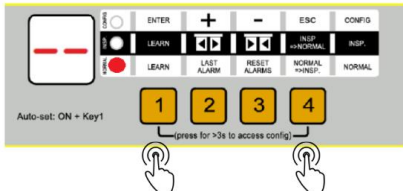
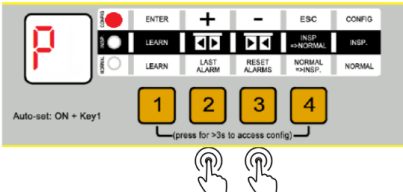
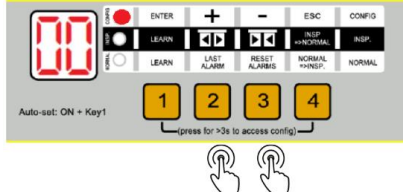
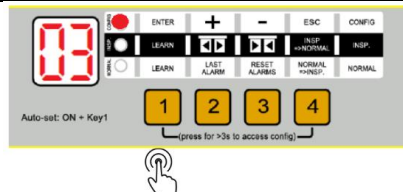
NOTES	This is the default mode at the power on of the door drive. ALL inputs are active	ALL the signal from the MLC are not active	Parameter selection: "P" showed alternate to the parameter index
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How to set parameter P90 and select the motor

Follow the instructions on the label on the red cover and in the table below to select parameter P90 and choose the installed motor.

During the initial installation, you must first install the motor.

To view the full list of available motors, scan the QR code.

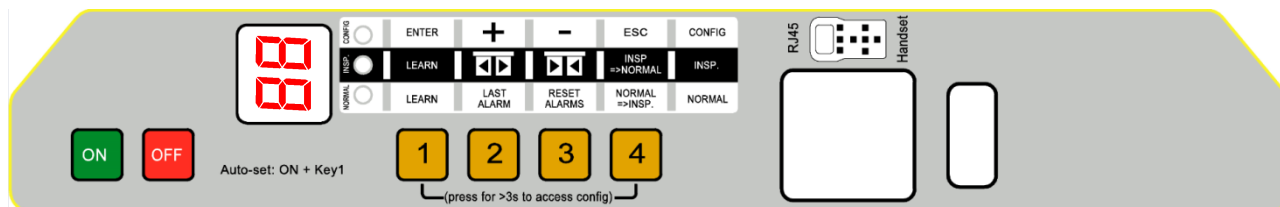
Step	Description	
1	Press 1 and 4 at the same time for >3 sec to access CONFIGURATION MODE .	
2	Press 2 or 3 to move forward or backward through the numbers until you reach PARAMETER P90 .	
3	Press 1 to confirm PARAMETER P90 .	
4	Press 2 or 3 to move forward or backward through the numbers until you reach the PARAMETER OF THE MOTOR IN USE .	
5	Once reached the NUMBER OF THE MOTOR IN USE , press 1 to confirm. EXAMPLE: set parameter 03 if you're using DC motor 1Nm 65PC132 (Siboni).	

Scan the **QR CODE** to access the **LIST OF MOTORS** associated with **PARAMETER P90**.



Door set-up, Learning (AUTOSSET) and functional test

Once the installation phase described in the previous paragraph is completed, it is possible to proceed with the power o of the device and its configuration. In case of problems during the execution of the phases, please refer to the user manual.



STEP	Operation	Description	Notes
1	Power supply test	Connect the main power supply. Press  key and check the front panel display as indicated.	 followed by 
2	Select the correct motor for the application.	Select parameter P-90 using the front panel. Then press  key.	Please refer to Section 4.3.2 of User Manual for access via the front panel.
2	AUTOSSET execution	Put the door panels near to the panels closed position (gap<10cm), then press and keep pressed key  on the door drive front panel. Press  key, checking that "SL" is shown on the door drive display, then release key  . Floor with DTBC contact active (not available for magnetic switches application): AUTOSSET for second TB floor will start automatically. FIRST AUTOSSET MUST NOT BE EXECUTED AT DTBC FLOOR. The door starts the auto-set procedure auto-detecting: - the closing rotation - the skate space - the door movement space - the door closing torque profile to optimize the closing force detection In case the of errors or alarms, proceed with the checks suggested in the user manual. To optimize the execution of the learning procedure, it is suggested but not mandatory to couple car and landing door, by performing the operations from the car top in inspection mode. The AUTOSSET phase is completed.	 NORMAL, INSP. and CONFIG LEDS are all ON  fixed Auto-set for DTBC contact:  fixed In case or error:  alternate to the error code. In case of alarm:  alternate to the alarm code.  fixed

3	Door operator configuration (check & set)	Check and configure the parameters related to the installed door operator (please refer to paragraph 5.1 of User Manual): <table><tr><td>P05</td><td>SET</td><td>Car door locking device: 0 = not present, 1 = present</td></tr><tr><td>P28</td><td>CHECK</td><td>Skate type: 02 = S20 09 = S90 12 = S120</td></tr><tr><td>P99</td><td>SET</td><td>MLC commands logic 0 = H active and RSC forced closing 1 = L active and RSC reduced speed 2 = H active and RSC reduced speed 3 = L active and RSC forced closing 4 = CAN BUS</td></tr></table>	P05	SET	Car door locking device: 0 = not present, 1 = present	P28	CHECK	Skate type: 02 = S20 09 = S90 12 = S120	P99	SET	MLC commands logic 0 = H active and RSC forced closing 1 = L active and RSC reduced speed 2 = H active and RSC reduced speed 3 = L active and RSC forced closing 4 = CAN BUS	Refer to the user manual for the information about access to Configuration Mode.
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4	Inspection mode	Put CDD6 in inspection mode by pressing key 4 and check the INSP. LED is ON.	 INSP. LED is ON									
5	Speed Profiles check in Inspection mode	Press continuously key 3 to execute the door closing with normal speed, until the door is completely closed. Press continuously key 2 to execute the door opening with normal speed, until the door is completely opened. In case it is necessary to tune the speed profiles, please refer to the paragraph 5.2.1 of User Manual.	Display visualization:  blinking  fixed (closed)  blinking  fixed (open)									
6	Check of door movements and reversing in NORMAL MODE	Check the door movements with the door drive in NORMAL mode (press key 4 if INSP mode is active), to check the commands from the lift controller to: - move the door in opening and closing - Door reversing in case of obstacle - Door reversing from light curtains signal	 LED NORMAL ON									

Installation Trouble-shooting

The installation sequence previously reported describes all the steps that must be executed to operate a correct and complete set-up of the door system.

In case of issues, or if anomalous behaviors happening during the installation, please refer to the User Manual, paragraph “Troubleshooting (FAQ)”.

For any alarms, please refer to the paragraph “Alarms”.