

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	CE					PRJ1166_01_07_03_01_00_QR	rev.03
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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	-

Compatible motors data

(Code) Motor Type / Transmission / Encoder	Nominal power	Nominal Voltage	Nominal current
DC Motors			
(12) GR 63x25 + SG80K (15:1) + Enc100	50VA	24V	2.7A
(13) GR 63x55 + SG120 (15:1) + Enc100	100VA	24V	4.9A
(20) M63x50 + SN40 (15:1) + IGO100/2	100VA	24V	4.9A
(21) M63x25 + SN31 (15:1) + IGO100/2	100VA	24V	2.7A
(23) M48x60 + SN 22,6 (7:1) + IGO100/2	50VA	24V	2.6A
(01) Moog™ 1Nm (4:1 belt) + Enc500	100VA	24V	3.6A
(02) Moog™ 2Nm (4:1 belt) + Enc500	200VA	24V	6.0A
(02) Siboni™ 2Nm 65/75PL130	200VA	60V	7.1A
(03) Siboni™ 65PC132 (4:1 belt) + Enc500	150VA	65V	2.7A
(04) Siboni™ 65PC132 QKS 11	150VA	65V	2.7A
(24) Sidoor™ M2 (Siemens™)	43VA	24V	1.8A
(25) Sidoor™ M3 or M4 (Siemens™)	120VA	30V	4.0A
(17) AT25™ M63x25 24V (Siemens™)	70VA	24V	2.8A
(18) AT25™ M63x55 30V (Siemens™)	120VA	30V	4.0A
(30) S78L™ (Prisma™ FOX)	100VA	24V	5.6A
(31) M63x60/I + P63Z + IGO100/2 (Sele™)	150VA	40V	3.0A
Brushless Motors			
(14) BG 62x60 + SG120 (15:1) + Enc100	130VA	40V	3.9A
(16) BG 62x30 + SG80K (15:1) + Enc100	70VA	40V	2.2A
(28) 1A (Prisma™ Jaguar)	160VA	40V	4.0A
(29) 2A (Prisma™ Jaguar)	320VA	40V	8.0A
DC Motors for Magnet switches applications			
(05) DC 1Nm comp. F28™/LMDC2010™	100VA	24V	3.6A
(06) DC 2Nm comp. F29™/LMDC2011™	200VA	24V	6.0A
(07) DC 1Nm comp. Digidoor™ 1Nm	100VA	24V	3.6A
(08) DC 2Nm comp. Digidoor™ 2Nm	200VA	24V	6.0A
(19) Siboni™ 65PC132 Poly V	150VA	65V	2.7A
(22) Siboni™ 65PC132 Poly V Digidoor™ 1Nm	150VA	65V	2.7A

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Installation

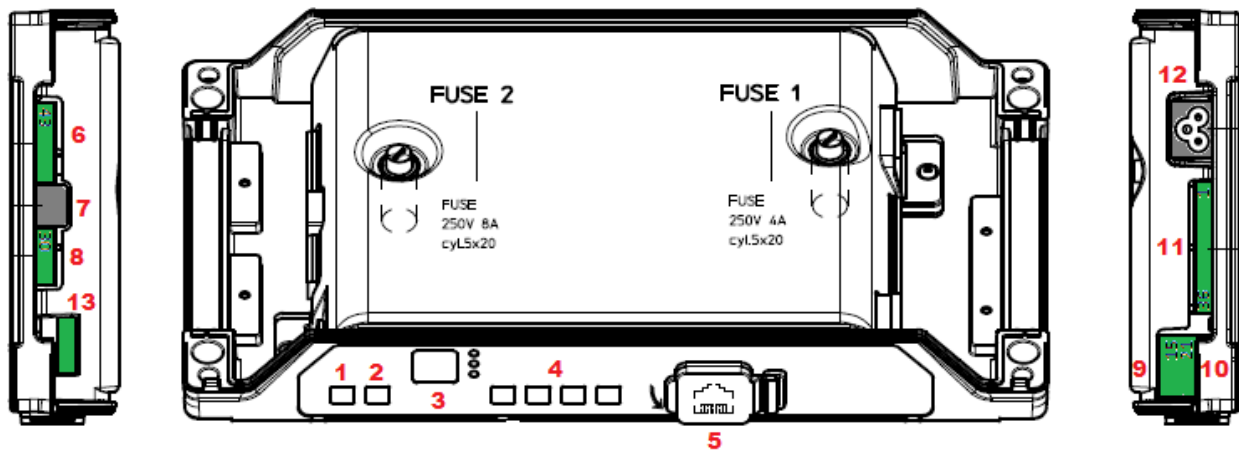
The installation of the drive has to be performed by expert technical personnel, having all the professional requirements expected, based on the active law in the installation country.

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 CDD 6.0 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:

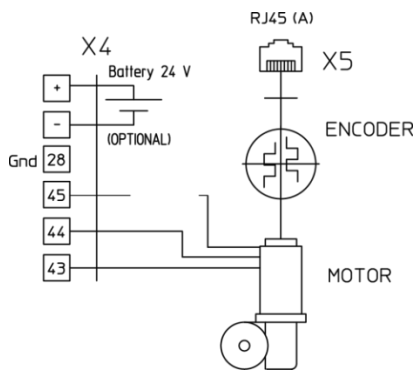
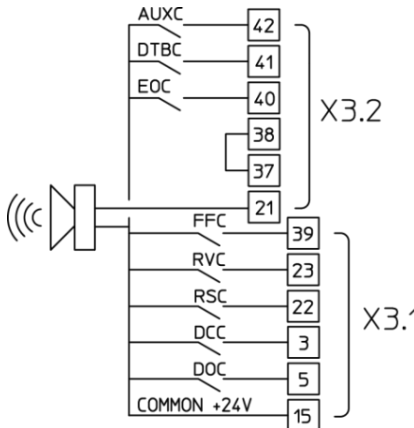
N°	ID	Descrizione
1	ON	Power on button
2	OFF	Power off button
3	Display	7-segments (2 digits) for the visualization of the door drive status or programming
4	"1" "2" "3" "4"	Functional buttons for visualization/movement/programming
5	X8	external device connection for diagnostic, configuration and upgrade
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.

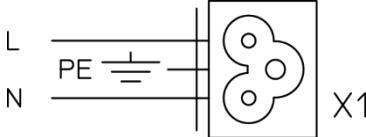
Check of Electrical parts

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

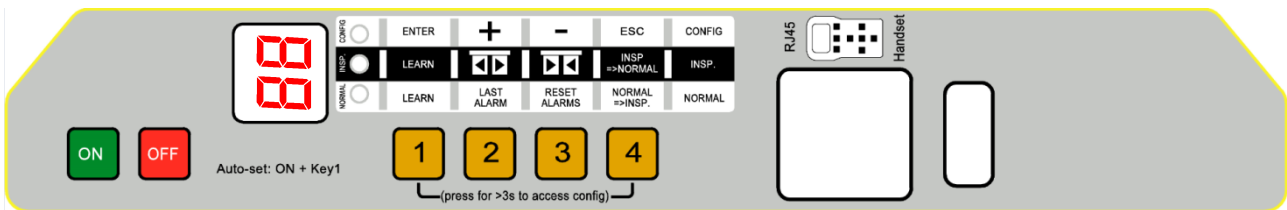
Once the mechanical installation of the CDD6 drive is completed, proceed as reported below.

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 	<p>1.Connect the motor cable to the pins of the X4 connector:</p> <table border="1"> <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> <p>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.</p> <p>2.If present, connect the encoder cable with its RJ45 male to the X5 connector.</p> <p>3.If present, connect the external battery kit to the positive (+) and negative (-) pins of the X4 connector.</p>	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 	<p>In case of replacement of different controllers with different plugs proceed as following reported, otherwise plug the previous connectors as they are.</p> <p>Check the common voltage used, and the used contacts:</p> <table border="1"> <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)</td> <td>Remove the 37-38 bridge, only in case there are no local contact installed on the car roof</td> </tr> </tbody> </table> <p>For further information please refer to the door drive manual</p> <p>Connection of the MLC commands and of the local contacts: For encoder applications</p> <table border="1"> <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 border="1"> <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)	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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6	<p>Power supply connection</p> 	<p>Nominal Supply Voltage: [100 – 240]Vac [50-60]Hz, single phase Range: [115-20%, 230+30%]Vac</p>
7	<p>Final Checks</p>	<p>Verify that required signals are connected, then apply the cover. For further information please refer to to the user manual.</p>

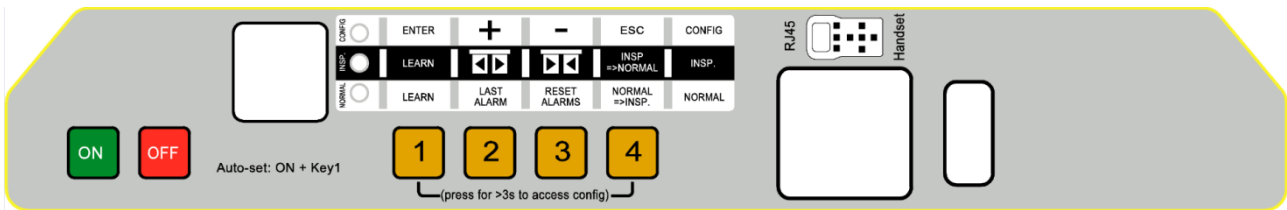
HMI user interface














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		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	Pressed for t>3s when last alarm is showed: 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

Door set-up, Learning and functional test

Once the installation phase described in the previous paragraph is completed, it is possible to proceed with the power on 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	<p>Connect the main power supply.</p> <p>Press  key and checks the front panel display as indicated.</p> <p>Then press  key.</p>	<p>88 followed by --</p>
2	AUTOSET execution	<p>Put the door panels near to the panels closed position (gap<10cm), then press and keep pressed key 1 on the door drive front panel.</p> <p>Press  key, checking that "SL" is shown on the door drive display, then release key 1.</p> <p>Floor with DTBC contact active (not available for magnetic switches application): AUTOSET for second TB floor will start automatically.</p> <p>The door starts the auto-set procedure auto-detecting:</p> <ul style="list-style-type: none"> - the closing rotation - the skate space - the door movement space - the door closing torque profile to optimize the closing force detection <p>In case the of errors or alarms, proceed with the checks suggested in the user manual.</p> <p>To optimize the execution of the learning procedure, it is suggested but not necessary to couple car and landing door, executing the operations from the car roof in inspection mode.</p> <p>The learning phase is completed.</p>	<p></p> <p>NORMAL, INSP. and CONFIG LEDs are all ON</p> <p>SL fixed</p> <p>Auto-set for DTBC contact: 52 fixed</p> <p>In case or error: Er alternate to the error code.</p> <p>In case of alarm: AL alternate to the alarm code.</p> <p> fixed</p>

3	Door operator configuration (check & set)	Check and configure the parameters related to the installed door operator (please refer to paragraph 5.1):		Refer to the user manual for the information about access to Configuration Mode.	
		P05	SET		Car door locking device: 0 = not present, 1 = present
		P22	CHECK		Motor Closing rotation: 0 = clockwise 1 = counter-clockwise
		P28	CHECK		Skate type: 02 = S20 09 = S90 12 = S120
		P90	CHECK		Installed motor type: 00 = self-recognized (not for all motors) XX = manual selected motor type
		P91	CHECK		Self-recognized motor type: 00 = autoselected procedure requested!? XX = recognized motor type
	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		
4	Inspection mode	Put CDD6 in inspection mode by pressing key 4 and check the INSP. LED is ON.		 <p>INSP. LED is ON</p>	
5	Speed Profiles check in Inspection mode	<p>Press continuously key 3 to execute the door closing with normal speed, until the door is completely closed.</p> <p>Press continuously key 2 to execute the door opening with normal speed, until the door is completely opened.</p> <p>In case it is necessary to tune the speed profiles, please refer to the paragraph 5.2.1</p>		<p>Display visualization:</p> <p> blinking</p> <p> fixed (closed)</p> <p> blinking</p> <p> fixed (open)</p>	
6	Check of door movements and reversing in NORMAL MODE	<p>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:</p> <ul style="list-style-type: none"> - move the door in opening and closing - Door reversing in case of obstacle - Door reversing from light curtains signal 		 <p>LED NORMAL ON</p>	

Installation Trouble-shooting

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

In case of issues, or anomalous behaviors happen during the installation, please refer to the user manual, part related to problems and solutions.

For any alarms, please refer to the user manual, part related to the Alarms.