# Certikin

## DOSING EQUIPMENT CATALOGUE

## **Certikin's Quality Statement**

It is the policy of Certikin to provide products and services which give total customer satisfaction.

The aims and objectives of the company are:

•To place safety and quality first in everything

•To fully understand our suppliers and customers' needs and expectations and to supply precisely the products and services agreed.

•To involve all staff, utilising their skills and abilities to the full, in support of our quality policy.

 $\bullet To$  set ourselves a target of annual improvement, based on the simple but

fundamental principle of 'do it right first time'.

Neil Murray, Managing Director

# **Dosing pumps**

CDE-FCO - Manual pump with stroke speed adjustment



#### ALSO AVAILABLE

CDE-FCOS Pump with manual stroke frequency adjustment suitable for essence dosing. Pump constructed to reduce sound output.

Pressure	Flow
bar	l/h
5	5
3	6,5

#### ACCESSORY KITS





n. 1 Foot filter with valve

n. 1 Injection valve

Delivery pipe m. 2

Suction pipe m. 2 Discharge pipe m. 2

n. 1 Installation manual

ACCESSORY KITS are included with ALL chemical dosing pumps.

n. 1



# **Dosing pumps**

CDE-VCL - Manual pump with stroke speed adjustment and level control



Pressure	Flow
bar	l/h
5	1
10	4
3	10
2	17

Available with autodegassing (self venting) pump heads

Pressure	Flow
bar	l/h
7	4
2	13
1	13,5

## ALSO AVAILABLE

#### CDE-VCLG

Metering pump for flocculant with double measurement scale (24h) with level probe.

From 0 to 300 gr/day From 0 to 3000 gr/day

CDE-VMS EN Metering pump for algicide with - weekly timer, microprocessor digital controls, LCD dispaly and level probe.



CDE-VMS PH Proportional pump driven by internal built-in pH meter (0÷14pH) and level control, supplied without pH probe.

CDE-VMS RH Proportional pump driven by internal built-in ORP (ORP) meter (0÷1000mV) and level control, supplied without ORP probe. CDE-KCL - Manual pump with stroke length and stroke speed adjustment with level control



Pressure	Flow
bar	l/h
2	18
5	10
20	01

Available with autodegassing (self venting) pump heads

Pressure	Flow
bar	l/h
2	13
5	7,5
20	0,5

#### **ALSO AVAILABLE**

#### CDE-KIS

Proportional pump driven by external digital signal, with level control: to each external pulse corresponds one pump injection.

CDE-KIC

Proportional pump driven by current signal (0-4mA=0pulses; 20mA=max pulses) and level control.

CDE-KMS PH Proportional pump driven by internal built-in pH meter (0÷14pH) and level control, supplied without pH probe.

CDE-KMS RH Proportional pump driven by internal built-in ORP (ORP) meter (0÷1000mV) and level control, supplied without ORP probe.



## **Dosing pumps** MULTI CHEMICAL MEASUREMENT AND CONTROL

#### CDE-WDPHCL CDE-WDPHRH



CDE-WDPHRHS CDE-WDPHCLS CDE-WDPHBRS



#### **CDE-WPHRHC**



## **pH & Redox (ORP)** Swimming pool controller with 2 metering pumps.

**pH & Chlorine** 

Ranges: 0-14 pH and 0-10 mg/l  $Cl_2$ . Chlorine probe to specify at order. Controller settings by wheel. LCD backlight display.

Ranges: 0-14 pH and 0-1000 mV. Controller settings by wheel. LCD backlight display.

Alarm output, max dosing time alarm, probe check-up, pH priority dosing. Liquid ends in PVDF.

## pH / Redox (ORP)

pH / Cl

dry feeder.

pH / Br

Liquid ends in PVDF.

Swimming pool controller with one metering pump for acid (pH) and one 230VAC output driven by Redox (ORP) for salt generator or dry feeder.

Swimming pool controller with one metering pump for acid (pH) and one 230VAC output driven by Chlorine for salt generator or

Swimming pool controller with one metering

pump for acid (pH) and one 230VAC output driven by bromine for dry feeder (brominator).

Section pH / Redox

Pressure

bar 5

3

Flow I/h

1

10

<b>Pressure</b> bar	Flow I/h
5	1
3	10
Solenoid Valve VAC	$\begin{array}{c} \textbf{Consumption} \\ \mathcal{A} \end{array}$

10

230

## pH Redox (ORP) with calculated Chlorine (ppm) display

chiornie (ppin) display	Pressure	Flow
Swimming pool controller with 2 metering pumps.	bar	l/h
Ranges: 0-14 pH and 0-1000 mV.	5	1
Adjustment using keypad. LCD backlight display.	3	10

Alarm output, max dosing time alarm, probe check-up, pH priority dosing. Liquid ends in PVDF.

Probes specified at point of order.



# **Multi parameter controllers**

## **5-CHANNEL**



## **CDE-MAX5** (pH / Total chlorine / Free chlorine / Combined chlorine / Redox / °C / **Turbidity / Conductivity )**

MAX5 is a multiple digital controller system. It reads and controls up to 5 channels that can be programmed to control pH - ORP -Chlorine - Turbidity - Temperature - Total Chlorine.

pH: from 0 to 14 pH ORP (Redox): from 0 to 1000 mV Total Chlorine: from 0 to 10 mg/l Free Chlorine: from 0 to 10 mg/l Combined Chlorine: from 0 to 10 mg/l Turbidity: from 0 to 30 NTU Temperature: from 0 to 100 °C Conductivity: from 0 to 300 mS



## **2-CHANNEL CDE-LDPHxx Series Digital Controllers**

Digital controller with microprocessor and LCD backlight display. Using a revolutionary wheel the controller can be easily programmed.

3 proportional setpoints and 2 proportional On/Off or timered (PWM) setpoints. Stand-by input and max dosing time alarm. CHLORINE / BROMINE selector. Alarm for probe failure. General alarm output.

<b>CDE-LDPHRH</b>	pH (0÷14) - ORP (0÷1000mV) - °C (0÷99,9)
<b>CDE-LDPHCL</b> *	pH (0÷14) - Chlorine (0÷10 mg/l Cl <sub>2</sub> )* - °C (0÷99,9)
<b>CDE-LDPHO2</b>	pH (0÷14) - O2 (0÷200 mg/l H <sub>2</sub> O <sub>2</sub> ) - °C (0÷99,9)
CDE-LDPRC	pH (0÷14) - Chlorine (0÷10 mg/l $Cl_2$ ) - °C (0÷99,9) and ORP only reading (0÷1000mV)



# **Board mounted equipment**

FOR DOMESTIC & COMMERCIAL FEEDER APPLICATIONS

#### **CDE-PA- WDPHEV**



## For pH and ORP control. Salt chlorine generator or dry feeder (brominator) output.

- 1. Controller WDPHRHS
- 2. NFIL Filter
- 3. Probe Redox ERHS
- 4. Probe pH EPHS
- 5. Probe Holder NPED4

Dimensions: 400x600 mm

#### **CDE-PA- LDPHCLV**



#### pH correction & free chlorine/ bromine proportional control of a dry feeder (Chlorine/Bromine) output

- 1. Controller
- 2. Dosing Pump
- 3. NFIL Filter
- 4. Probe pH EPHS
- 5. Proximity switch SEPR
- 6. Temperature probe ETEPT7. Chlorine probe either:
- > ECL6 (as pictured) or
- > ECL0 (as pict > ECL3S/10

See page 13 for more information on chlorine probes.

Dimensions: 600x800 mm



# **Board mounted equipment** FOR DOMESTIC & LIGHT COMMERCIAL APPLICATIONS

#### **CDE-PA- WDPHRH**



#### For pH and Redox control.

- 1. Controller WDPHRH
- 2. NFIL Filter
- 3. Probe Redox ERHS
- 4. Probe pH EPHS
- 5. Probe Holder NPED4

Dimensions: 400x600 mm

#### **CDE-PA- WDPHCL**



## For pH and Chlorine control

- 1. Controller WDPHCL
- 2. NFIL Filter
- 3. Proximity switch SEPR
- 4. Probe pH EPHS
- **5.** Chlorine probe either:
- > ECL6 (as pictured) or
- > ECL3S/10

See page 13 for more information on chlorine probes.

Dimensions: 500x700 mm



# **Control and dosing** FOR COMMERCIAL APPLICATIONS

#### **CDE-PA- LDPHCLVD**



## For pH and chlorine proportional control. Medium size swimming pools.

- 1. Controller LDPHCL
- 2. Dosing Pump acid VMS MF 03 10 (10 l/h)
- 3. Dosing Pump chlorine VMS MF 02 17 (17 l/h)
- 4. NFIL Filter
- 5. Proximity sensor SEPR
- 6. Probe pH EPHS
- 7. Temperature probe ETEPT
- 8. Chlorine Probe either:
  - > ECL6
  - > ECL3S/10

See page 13 for more information on chlorine probes.

Dimensions: 600x800 mm



# **Control and dosing** FOR HEAVY COMMERCIAL APPLICATIONS

#### CDE-PA-M5DB



#### For pH, ORP, Free chlorine, Total Chlorine, Combined chlorine, Temperature, Flocculant and Algicide.

- 1. Multiparameters controller MAX5 (pH, Cl, Clt, T°)
- 2. Dosing Pump acid VMS MF 03 10
- **3.** Dosing Pump chlorine VMS MF 02 17
- **4.** Dosing Pump flocculant VCLG
- 5. Dosing Pump algicide VMS EN 07 06
- 6. NFIL Filter
- 7. Probe pH EPHS

Dimensions: 1000x800 mm

- 8. Probe Redox ERHS
- 9. Temperature probe ETEPT
- **10.** Probe free chlorine ECL3S/10
- **11.** Probe chlorine ECL8/10
- **12.** Proximity sensor SEPR
- **13.** Probes holder PEF22



# **Commercial systems**





#### **Pump board**

Panel mounted board. Dosing pumps selected from wall mount range. Board shown includes multifucntion valves which offer:

- 1. Pressure Relief
- 2. Pressure Sustaining
- 3. Syphon/Bleed



#### **Control board**

- 1. Controller(s) from our range
- 2. NFIL Filter
- 3. Probes and probe holder from our range

All panel mounted to suit your specification.



#### **Tank Set**

Foot mounted dosing pump and electronic agitator mounted on chemical dosing tank which can be bunded to prevent chemical spillage.

Various dosing tank and bund sizes available.

## **Worldwide Control System** LAN - GPRS/GSM - WEBSERVER WITH HOSTING SERVICE

## "ERMES" - COMMUNICATION SOFTWARE

Upto 30 controllers can be linked in a localised network using a RS485 protocol. Using ERMES software, you can monitor and manipulate each controller remotely.

#### WAYS TO CONNECT

#### LOCAL control

All controllers, par the CDE-LD multichannel controllers can be fitted with a USB port for direct connection to the PC. CDE-LD multichannel controllers can be connected using a RS485-USB converter. For local control please select USB Basic. To allow data download directly from the controller to a USB memory stick, please choose USB advanced

#### ETHERNET control

Controller is fitted with an internal network point (Cat5e). Users can connect to the controller through a local network and the internet.

#### **REMOTE** control

Controller is fitted with an internal GPRS modem. Using a compatible mobile SIM card (sold separatley) it can be used to connect to the controller remotely over the internet.

ERMES is capable of sending SMS alerts to upto 4 pre-programmed numbers or upto 4 email addresses for alarms. Users can also text the controller to receive up to date readings from the controller

A summary of the available options is shown in the table below:

	RS485 comm	USB* comm	ETHERNET module	MODEM module	USB 2.0 module DATA LOG
BASIC configuration	•	•			
ADVANCED USB configuration	•	•			•
ETHERNET configuration	•	•	•		
GSM/GPRS configuration	•	•		•	

\* Not available on LD Multichannel Series.

#### Points to consider before ordering:

- It is possible to retrofit communication modules to existing controllers.
- Modules can be installed internally or externally to suit
- Use of GSM/GPRS modem is dependant on mobile data signal. An external modem maybe required where signal strength is low.
- Ethernet connection requires direct, wired, connection to a local network. A system administrator will be required to configure firewall access etc.
- It is possible to piggy back multiple controllers -- i.e. controllers wired, via RS485, into a controller with a GSM modem may also be connected to over the internet



## **Worldwide Control System** LAN - GPRS/GSM - WEBSERVER WITH HOSTING SERVICE

#### FEATURES

Standard configurations features are described in the table below:

	RS485 net (1)	USB comm service <sup>(2)</sup>	EMAIL alert service <sup>(3)</sup>	HTTP remote service <sup>(4)</sup>	SMS alert service <sup>(5)</sup>	USB data log <sup>(6)</sup>
BASIC configuration	•	•				
ADVANCED USB configur	ation •	•				•
ETHERNET configuration	•	•	•	•		
GSM/GPRS configuration	•	•	•	•	•	
<sup>(1)</sup> RS485 net:	RS485 port for connecting instruments to network or to a PC using a converter					
<sup>(2)</sup> USB comm service:	direct PC/instrument link using USB					
(3) EMAIL alert service:	email multi-level alert messages using standard pop protocol					
(4) HTTP remote service:	instruments configuration using a standard browser					
<sup>(5)</sup> SMS alert service:	SMS multi-level alert messages using standard Short Message Service protocol					

(6) USB data log:

SMS multi-level alert messages using standard Short Message Service proinstrument data activity recorded on standard USB pen-drive

#### ERMES softward allows users to control and program controllers in many different ways:

**Connection using a RS485 network and USB or RS485 cable.** This connection enables the user to control one or more instruments directly connected to a PC.

## Connection using a RS485 network and GSM modem or RS485 cable.

This connection enables the user to control one or more instruments from anywhere in the world via a standard Internet connection and a data SIM card.

#### Connection using a RS485 network and ETHERNET router.

This connection enables the user to control one or more instruments within a LAN (Local Area Network).

#### Connection using a RS485 network and WIFI router.

This connection enables the user to control one or more instruments using wireless technology as on notebooks.





## Accessories



#### **CDE-EPHS**

pH electrode for pressures up to 7bar/ 70°C (3.5bar/80°C). 0.8m cable. Epoxy body. Minimum 100µS.



**CDE-ERHS** 

ORP electrode for pressures up to 7bar/70°C (3.5bar/80°C). 0.8m cable. Epoxy body. Minimum 100µS.



#### **BUFFER SOLUTIONS**

Buffer solutions for probe calibration.



#### **CDE-ECL8**

Total chlorine amperometric cell (organic and inorganic), from 0 to 2 mg/l; from 0 to 20 mg/l, pH and temperature compensated.



#### CDE-ECL3S/10

Free chlorine amperometric cell (organic and inorganic), from 0 to 10 mg/l, pH and temperature compensated.



#### **CDE-ECL6 - ECL12**

Free chlorine / bromine amperometric cell (organic and inorganic), from 0 to 10 mg/l. Flow switch and flow adjustment. Electrode holder for pH, Redox and temperature. With proximity switch mod. SEPR. 6x8 fittings.



**CDE-ETEPT** 

Temperature probe (0°C÷100 °C, max 10bar).



# Accessories



**CDE-NFIL CA** 

5" filter with carbon activated filter cartridge. 6x8 fittings.



**CDE-NFIL** 





#### **CDE-NPED4**

Off-line electrode holder for EPH, ERH electrodes. Temperature max 50° C, max pressure 5bar with flow sensor with N.O. contact. 6x8 fittings.



#### **CDE-PEF22**

Free, total chlorine, pH, ORP and Temperature probes holder with flow switch and flow adjustment. 6x8 fittings. Best for MAX5 digital controller.



**CDE-EVLA** Solenoid valve for dry feeder. 1/2" fitting.



#### **CDE-PEF1**

Off-line electrode holder for ECL1/2/3/8/9/10/11 and pH, Redox and temperature, with flow switch and flow regulation. With proximity switch mod. SEPR. 6X8 fittings.



#### **CDE-PELC**

PVDF in-line electrode holder for pH / Redox electrodes with 1/2" or 3/4" thread. For saddle connection.

## **CDE-PEL**

PVDF in-line electrode holder for pH / Redox electrodes with 1/2" or 3/4" thread. For "T" connection.



# Accessories





#### **CDE-MIXV/8**

High speed mixer 1400 RPM. AISI shaft-PVC coated, length available: 630 mm. Marine impeller, diameter 70 mm.



Low speed mixer 65/200/400 RPM. AISI shaft-PVC coated, different lengths available (630-730-980 mm). 3-blade impeller, diameter 150 mm.

## **CDE-MIX/MAN**

Manual mixer. PVC shaft, length available: 390 mm. Impeller diameter 90 mm.



#### **CDE-LASP/x**

Suction lances with level control, for tanks up to 25 litres (suitable for carboys).



Suction lances with level control, for tanks up to 1000 litres.



CHEMICAL TANKS & SAFETY BUNDS

Polyethylene, anti-UV for chemicals. Complete chemical tanks with safety bunds.

ŀ

#### INJECTION VALVE 1/2"

Injection valve (PVDF).



Level probe with foot filter and BNC connector (full natural PVDF).



1/2" injection lance for dosing sodium hypochlorite in hard water. PVDF body. Viton® or EPDM o-ring. Ball valve.

**CDE-LINIR** 

# MF MULTIFUNCTIONS VALVE

Multifunction valve (pressure, safety, antisyphon and bleed) 1/2" connections for different hose diameters. Pressure range adjustable from 1 to 5 bar for pressure valve operating mode, from 1 to 18 bar for safety valve operating mode. Discharge connection 3/8" 4x6. Viton® or EPDM o-ring. PVDF body.



# Notes





Certikin Ltd • Witan Park • Avenue Two • Station Lane Industrial Estate • Witney • Oxon • OX28 4FJ • Reg. in England No. 3047290 E-mail: enquiries@certikin.co.uk

Certikin France. - ZI de Torremilla - 219 Rue Henry POTEZ - 66000 PERPIGNAN Tél : 04 68 52 64 30 Fax: 04 68 52 64 30 - sentex@sentex-france.com

Certikin Pool Ibérica S.L.U. P.I. Mas Puigvert-Oest 19-20 Parc.3 - 08389 Palafolls (BARCELONA) Tel: 902 02 03 42 Fax: 93 764 53 97

Certikin Italia SpA - Via Gavardina 96/98/100 25010 Ponte S.Marco (BS) Italia - Tel. +39 030 9980088 Fax +39 030 9637619 - P.I. 00813790987 - Reg. Imp. di Brescia 00813790987 - Capitale Sociale 300.000,00 int. vers.

> Certikin India 7a Dyavasandra Industrial Estate 3rd Cross Singayanapalya Bangalore India 560048 T + 91 80 4094 3024 F + 91 80 4094 3025

> > Certikin Middle East Jebel Ali Free zone Dubai T+ 971 4 8861404 F + 971 4 8861004