

# CONTROL RELAYS LEVEL CONTROL

RELIABLE SOLUTION TO  
REGULATE & CONTROL  
LIQUID LEVELS & MIXING RATIOS



Crouzet Level Control Relays include single function and multi-function monitoring relays. They can be used for over flow and dry-running protection, for filling and draining applications, for max and min alarm; or any combination of such functions. In agricultural applications, watering, irrigation, drying, distribution and treatment of water, etc., Crouzet Level Control Relays are used to manage and protect equipment by controlling emptying and filling levels.

To properly respond to the requirements of level control, the Crouzet Level Control range offers relays that monitor by measuring liquid resistivity and enable adjustment of measurement sensitivity so as to precisely set closing and tripping levels. In addition, a selectable time delay takes wave effect into account, avoiding unwanted closing and tripping due to movements of liquid.

## LEVEL CONTROL RELAYS ARE AVAILABLE IN 6 HOUSINGS:

- › 17.5 mm DIN Rail Modular
- › 22.5 mm DIN Rail Modular
- › 35 mm DIN Rail Modular
- › 45 mm DIN Rail Industrial
- › 39 mm Plug-in 8-pin base
- › 39 mm Plug-in 11-pin base

## FEATURES:

- › Several functions in the same housing optimizes wiring time and simplifies installation
- › Easy-to-use thanks to its visual LED interface
- › New-generation built-in multi-voltage power supply simplifies product selection
- › Eco-friendly design
- › Wide range of accessories such as electrode and probe holders available
- › Recognized quality and reliability

## AGENCY APPROVALS



## FUNCTIONS:

- › Automation of filling & emptying cycles
- › High or low level control
- › Check for presence of a conductive or non-conductive liquid by temperature probe or discrete sensor
- › Adjustable time delay

## TYPICAL APPLICATIONS:

- › Water treatment facilities
- › Pumping stations
- › Beverage vending machines
- › Industrial washing machines
- › Milk tanks
- › Fountains

## Where they can be used to:

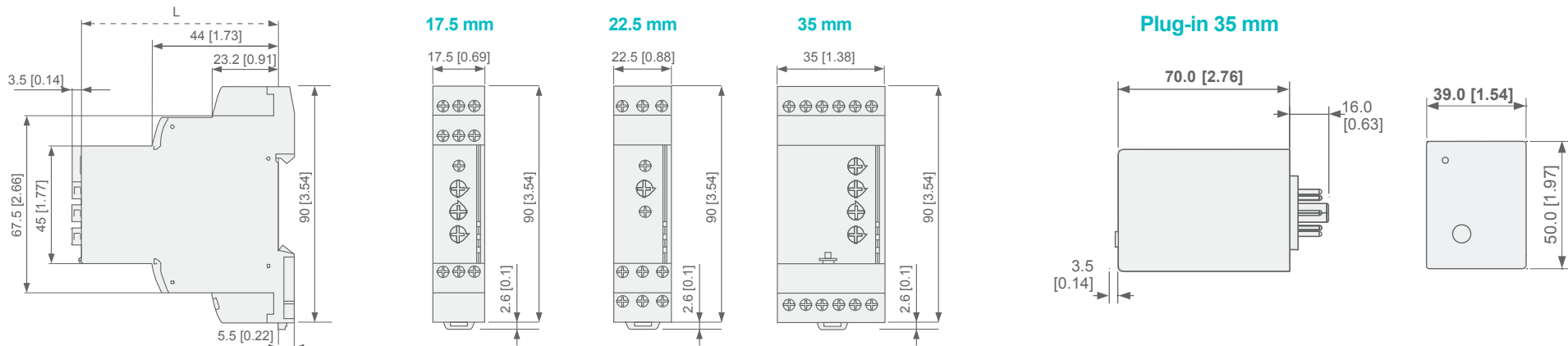
- › Protect against container overflow
- › Detect leaks
- › Control mixing ratios
- › Protect pumps against dry running

## LEVEL CONTROL RELAYS

Part Number	Type	Probe	Emptying / Filling	Level / Measurement Range	Timing	Changeover Output Relay	Housing Width (mm)	Supply	Agency Approvals
<b>Modular Housing</b>									
84 870 200	ENR	Resistive	Yes / Yes	2 / 5 K $\Omega$ to 100 K $\Omega$	No	1 x 8 A	22.5	24 to 240 VAC / VDC	CE, C-UL-US Listed, CSA
84 870 210	ENRM	Resistive	Yes / Yes	1 or 2 / 250 $\Omega$ to 1 M $\Omega$	0.1 s to 5 s	1 x 8 A	22.5	24 to 240 VAC / VDC	CE, C-UL-US Listed, CSA
84 870 700	HNM	Resistive	Yes / Yes	1 or 2 / 250 $\Omega$ to 1 M $\Omega$	0.1 s to 5 s	2 x 5 A	35	24 to 240 VAC / VDC	CE, C-UL-US Listed, CSA
84 870 710	HNE	Digital or PNP / NPN	Yes / Yes	1 or 2 / None	0.1 s to 5 s	1 x 5 A	35	24 to 240 VAC / VDC	CE, C-UL-US Listed, CSA
84 870 720	MNS	Digital	No / Yes	1 / None	0.1 s to 5 s	1 x 5 A	17.5	24 to 240 VAC / VDC	CE, C-UL-US Listed, CSA
<b>Industrial Housing</b>									
84 870 501	FN	Resistive	Yes / Yes + Alarm	2 / 5 K $\Omega$ to 100 K $\Omega$	No	2 x 8 A	45	24 VAC	CE, C-UL-US Listed
84 870 502	FN	Resistive	Yes / Yes + Alarm	2 / 5 K $\Omega$ to 100 K $\Omega$	No	2 x 8 A	45	48 VAC	CE, C-UL-US Listed
84 870 503	FN	Resistive	Yes / Yes + Alarm	2 / 5 K $\Omega$ to 100 K $\Omega$	No	2 x 8 A	45	120 VAC	CE, C-UL-US Listed
84 870 504	FN	Resistive	Yes / Yes + Alarm	2 / 5 K $\Omega$ to 100 K $\Omega$	No	2 x 8 A	45	230 VAC	CE, C-UL-US Listed
84 870 803	FN LS	Resistive	Yes / Yes + Alarm	2 / 250 $\Omega$ to 5 K $\Omega$	No	2 x 8 A	45	230 VAC	CE, C-UL-US Listed
<b>Plug-in Housing</b>									
84 870 301	LN	Resistive	No / Yes	2 / 5 K $\Omega$ to 100 K $\Omega$	No	1 x 8 A	39 Plug-in 8-pin base	24 VAC	CE, C-UL-US Listed
84 870 303	LN	Resistive	No / Yes	2 / 5 K $\Omega$ to 100 K $\Omega$	No	1 x 8 A	39 Plug-in 8-pin base	120 VAC	CE, C-UL-US Listed
84 870 304	LN	Resistive	No / Yes	2 / 5 K $\Omega$ to 100 K $\Omega$	No	1 x 8 A	39 Plug-in 8-pin base	230 VAC	CE, C-UL-US Listed
84 870 306	LN	Resistive	No / Yes	2 / 5 K $\Omega$ to 100 K $\Omega$	No	1 x 8 A	39 Plug-in 11-pin base	24 VAC	CE, C-UL-US Listed
84 870 308	LN	Resistive	No / Yes	2 / 5 K $\Omega$ to 100 K $\Omega$	No	1 x 8 A	39 Plug-in 11-pin base	120 VAC	CE, C-UL-US Listed
84 870 309	LN	Resistive	No / Yes	2 / 5 K $\Omega$ to 100 K $\Omega$	No	1 x 8 A	39 Plug-in 11-pin base	230 VAC	CE, C-UL-US Listed
84 870 401	L2N	Resistive	Combined with monitoring of wells	2 / 5 K $\Omega$ to 100 K $\Omega$	No	1 x 8 A	39 Plug-in 11-pin base	24 VAC	CE, C-UL-US Listed
84 870 403	L2N	Resistive	Combined with monitoring of wells	2 / 5 K $\Omega$ to 100 K $\Omega$	No	1 x 8 A	39 Plug-in 11-pin base	120 VAC	CE, C-UL-US Listed
84 870 404	L2N	Resistive	Combined with monitoring of wells	2 / 5 K $\Omega$ to 100 K $\Omega$	No	1 x 8 A	39 Plug-in 11-pin base	230 VAC	CE, C-UL-US Listed

## MECHANICAL DIMENSIONS (A,B)

	17.5 mm	22.5 mm	35 mm
L mm [in]	68 [2.67]	60 [2.36]	60 [2.36]



(A) All dimensions in drawings are in millimeters [inches] and are for reference only.

(B) For complete information on available packages see product datasheet available at [www.crouzet.com](http://www.crouzet.com)

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