# Engineered for efficiency, designed for durability

Achieve smarter, more reliable tower performance with Indeeco's next-gen control solution



## **Panel Performance Features**

**Ambient Temperature Range** -10° F to 104° F

### Fail Safe

Fail Safe Output relay is de-energized if the input sensor is either open or short-circuited preventing heater burnout problems.

#### **NEMA 4X Enclosure**

Includes pre-mounted electrical hubs for conduit connections.

#### **Single Probe with Dual Sensing**

Senses both water temperature and water level. Sensor probe supplied with 12 ft outdoor rated cord pre-wired to control board. Probe also supplied with PVC hub connector for attachment through cooling tower basin wall

#### **Probe Construction**

Constructed out of 316 SST tubing and 304 SST fitting to minimize corrosion. Probe can be installed horizontally or vertically with a pressure rating of 15 psi.

#### **Remote Interlock Terminal Block**

A means of safeguarding to prevent operation if an interlock is open.

#### **Lower Cost**

Installation time and cost are reduced by replacing individually mounted temperature and liquid level control devices with one pre-engineered and assembled control package that requires only one probe to sense both water temperature and level.

#### **Standard Options**

Door disconnect, fusing, circuit breaker, fusing with door disconnect, and circuit breaker with door disconnect. Direct immersion cords, custom cord lengths up to 125 ft, 0° F - 100° F adjustable control board, 304 SST enclosure.

### **New Optional Features**

#### **Digital Temperature Display**

The digital temperature display provides more precise and reliable temperature readings, enabling better control and optimization of the cooling process. This leads to improved energy efficiency, enhanced performance, and better overall system health.

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#### **Adjustable Setpoint**

An adjustable temperature setpoint on a cooling tower basin offers several benefits, including energy savings, optimized system performance, and enhanced control over water temperature. This allows for fine-tuning the cooling tower's operation based on changing needs and conditions, leading to improved efficiency and reduced operating costs.

#### **Optional RS485 Communication**

RS485 communication allows operators to monitor the cooling tower's water basin, including temperature and conductivity. Operators can remotely control the cooling tower's basin heater operation, such as adjusting setpoints.

#### **Enclosure Heater**

An integrated enclosure heater is provided to ensure reliable operation at low ambient temperatures as well as prevent issues related to condensation inside the enclosure.

#### Low Temp Alarm

An optional set of contacts provides remote indication of low basin temperature.

#### Low Water Alarm

An optional set of contacts provides remote indication of low basin water level.

MKL-4464-00



## Catalog Numbering System for Cooling Tower Control Panels

## Catalog units: 874Z - X X A B C D -E - see list below

## Custom units: 874Z - 123456 - custom serial number assigned at time of order

874	Z-	ххх	А	В	с	D	-Е
Product Code Number for	Agency Status	Control Type	Catalog Listed Option	Control type-Probe-Cable	Nominal Cord Length	Voltage/ Phase Code	Options
Cooling Tower Control Panels	X = Non-UL/CSA Un-cataloged L =UL Un-cataloged Z = UL and CSA Cataloged S = CSA only	2XX = Printed Circuit Board, see below for pre-assigned numbers 3XX = Digital controller, see below for pre-assigned numbers	0 = Standard 1 = Door Disconnect 2 = Fusing 3 = Circuit Breaker 4 = Fusing & Door Disconnect 5 = Circuit Breaker & Door Disconnect 6 = Standard w/ Aux. Contact 9 = Special	0 = Preset 45°F PCB Non-Adj. Outdoor cord 1 = Adj. PCB 0-100°F Outdoor cord 2 = RTD (required w/ digital controller) Outdoor Cord 5 = Preset 45°F PCB Non-Adj. Immersion, (DI) cord 6 = Adj. PCB 0-100°F Immersion, (DI) cord 7 = RTD (required w/ digital	0 = 12' 1 = 22' 3 = 32' 4 = 40' 5 = 50' 9 = Special	See table below	Blank = no options -A1* = Low temperature alarm -A2* = RS485 communication -A3* = Low water alarm -A4 = Heater "ON" dry contact -N = Enclosure drain -L = Heater "ON" pilot light
				controller) Immersion Cord (DI)			*only available with digital controller

Control			Ν	PCB Control Base Catalog	Digital Control Base Catalog						
Panel Type	Max Panel Amps	120V 1PH	208V 1PH	240V 1PH	480V 1PH	208V 3PH	240V 3PH	480V 3PH	Number (Add B, C, D & -E)	Number (Add B, C, D & -E)	
	16	1.9	3.3	3.8	7.6	5.7	6.6	13.3	874Z-2420	874Z-3420	
	24	2.8	4.9	5.7	11.5	8.6	9.9	19.9	874Z-2430	874Z-3430	
Standard Panel With No Options	32	3.8	6.6	7.6	15.3	11.5	13.2	26.5	874Z-2440	874Z-3440	
	40	4.8	8.3	9.6	19.2	14.3	16.6	33.2	874Z-2450	874Z-3450	
	48	5.7	9.9	11.5	23	17.2	19.9	39.8	874Z-2010	874Z-3010	
	16	1.9	3.3	3.8	7.6	5.7	6.6	13.3	874Z-2521	874Z-3521	
With Door	24	2.8	4.9	5.7	11.5	8.6	9.9	19.9	874Z-2531	874Z-3531	
Disconnect	32	3.8	6.6	7.6	15.3	11.5	13.2	26.5	874Z-2541	874Z-3541	
Option	40	4.8	8.3	9.6	19.2	14.4	16.6	33.2	874Z-2031	874Z-3031	
	48	5.7	9.9	11.5	23	17.2	19.9	39.8	874Z-2041	874Z-3041	
	24	2.8	4.9	5.7	11.5	8.6	9.9	19.9	874Z-2062	874Z-3062	
	32	3.8	6.6	7.6	15.3	11.5	13.2	26.5	874Z-2072	874Z-3072	
	40	4.8	8.3	9.6	19.2	14.3	16.6	33.2	874Z-2082	874Z-3082	
With Fusing Option	48	5.7	9.9	11.5	23	17.2	19.9	39.8	874Z-2092	874Z-3092	
	64	7.6	13.3	15.3	30.7	23	26.5	53	874Z-2102	874Z-3102	
	80	9.6	16.6	19.2	38.4	28.7	33.2	66.4	874Z-2112	874Z-3112	
	96	11.5	19.9	23	46	34.5	39.8	79.7	874Z-2122	874Z-3122	

Chart continues on next page

## Catalog Numbering System for Cooling Tower Control Panels (cont.)



Control			M	lax Panel	KW Rating	;s		PCB Control Base Catalog	Digital Control Base Catalog		
Panel Type	Max Panel Amps	120V 1PH	208V 1PH	240V 1PH	480V 1PH	208V 3PH	240V 3PH	480V 3PH	Number (Add B, C, D & -E)	Number (Add B, C, D & -E)	
	24	2.8	4.9	5.7	11.5	8.6	9.9	19.9	874Z-2133	874Z-3133	
	32	3.8	6.6	7.6	15.3	11.5	13.2	26.5	874Z-2143	874Z-3143	
	40	4.8	8.3	9.6	19.2	14.3	16.6	33.2	874Z-2153	874Z-3153	
With Circuit Breaker Option	48	5.7	9.9	11.5	23	17.2	19.9	39.8	874Z-2163	874Z-3163	
	64	7.6	13.3	15.3	30.7	23	26.5	53	874Z-2173	874Z-3173	
	80	9.6	16.6	19.2	38.4	28.7	33.2	66.4	874Z-2183	874Z-3183	
	96	11.5	19.9	23	46	34.5	39.8	79.7	874Z-2193	874Z-3193	
	24	2.8	4.9	5.7	11.5	8.6	9.9	19.9	874Z-2204	874Z-3204	
	32	3.8	6.6	7.6	15.3	11.5	13.2	26.5	874Z-2214	874Z-3214	
With Fusing and	40	4.8	8.3	9.6	19.2	14.3	16.6	33.2	874Z-2234	874Z-3234	
Door Disconnect	48	5.7	9.9	11.5	23	17.2	19.9	39.8	874Z-2244	874Z-3244	
Option	64	7.6	13.3	15.3	30.7	23	26.5	53	874Z-2254	874Z-3254	
	80	9.6	16.6	19.2	38.4	28.7	33.2	66.4	874Z-2264	874Z-3264	
	96	11.5	19.9	23	46	34.5	39.8	79.7	874Z-2274	874Z-3274	
	24	2.8	4.9	5.7	11.5	8.6	9.9	19.9	874Z-2285	874Z-3285	
	32	3.8	6.6	7.6	15.3	11.5	13.2	26.5	874Z-2295	874Z-3295	
With Circuit	40	4.8	8.3	9.6	19.2	14.3	16.6	33.2	874Z-2315	874Z-3315	
Breaker and Door Disconnect	48	5.7	9.9	11.5	23	17.2	19.9	39.8	874Z-2325	874Z-3325	
Option	64	7.6	13.3	15.3	30.7	23	26.5	53	874Z-2335	874Z-3335	
	80	9.6	16.6	19.2	38.4	28.7	33.2	66.4	874Z-2345	874Z-3345	
	96	11.5	19.9	23	46	34.5	39.8	79.7	874Z-2355	874Z-3355	

## Voltage/Phase Codes for Product Code 874 Control Panel

B = 120/1	E = 220/1	J = 240/1	O = Special	T = 480/1	X = 575/3
C = 208/1	G = 230/1	K = 240/3	R = 460/1	U = 480/3	Y = 600/1
D = 208/3	H = 230/3	N = 277/1	S = 460/3	W = 575/1	Z = 600/3

## Catalog Numbering System for Cooling Tower Control Panels (cont.)



## **Enclosure size table**

Control Panel Type	Max Panel Amps	PCB <=250V	PCB >250V	Adjustable Board <=250V	Adjustable Board >250V	Digital Ctrl <=250V	Digital Ctrl >250V	Option A1 These opt	Option A2 tions only ava	Option A3 ilable with di	Option A4 igital ctrlr	Option N	Option L
	16	Small	Small	Medium	Medium	Medium	Medium	Large	Large	Large			
Chandrad	24	Small	Small	Medium	Medium	Medium	Medium	Large	Large	Large			
Standard Panel with No	32	Small	Small	Medium	Medium	Medium	Medium	Large	Large	Large			
Options	40	Small	Small	Medium	Medium	Medium	Medium	Large	Large	Large			
	48	Small	Small	Medium	Medium	Medium	Medium	Large	Large	Large			
	16	Small	Small	Medium	Medium	Medium	Medium	Large	Large	Large			No Change in Box
With Door	24	Small	Small	Medium	Medium	Medium	Medium	Large	Large	Large			
Disconnect	32	Small	Small	Medium	Medium	Medium	Medium	Large	Large	Large			
Option	40	Small	Small	Medium	Medium	Medium	Medium	Large	Large	Large			
	48	Medium	Medium	Medium	Medium	Medium	Medium	Large	Large	Large			
	24	Medium	Large	Large	Large	Large	Large						
	32	Large	Large	Large	Metal	Large	Large						
	40	Large	Large	Large	Metal	Large	Large						
With Fusing Option	48	Large	Large	Large	Metal	Large	Large			No No e Change Change			
option	64	Large	Metal	Metal	Metal	Metal	Metal						
	80	Large	Metal	Metal	Metal	Metal	Metal						
	96	Large	Metal	Metal	Metal	Metal	Metal						
	24	Large	Large	Metal	Metal	Large	Large						
	32	Large	Large	Metal	Metal	Large	Large	No	No		No		
With Circuit	40	Large	Large	Metal	Metal	Large	Large	Change	Change		Change		
Breaker	48	Large	Large	Metal	Metal	Large	Large	in Box	in Box	in Box	in Box		
Option	64	Metal	Metal	Metal	Metal	Metal	Metal						
	80	Metal	Metal	Metal	Metal	Metal	Metal						
	96	Metal	Metal	Metal	Metal	Metal	Metal						
	24	Medium	Large	Large	Large	Large	Large						
	32	Large	Large	Large	Metal	Large	Large						
With Fusing	40	Large	Large	Large	Metal	Large	Large						
and Door Disconnect	48	Large	Large	Large	Metal	Large	Large						
Option	64	Metal	Metal	Metal	Metal	Metal	Metal						
	80	Metal	Metal	Metal	Metal	Metal	Metal						
	96	Metal	Metal	Metal	Metal	Metal	Metal						
	24	Large	Large	Metal	Metal	Large	Large						
	32	Large	Large	Metal	Metal	Large	Large						
With Circuit Breaker	40	Large	Large	Metal	Metal	Large	Large						
and Door	48	Large	Large	Metal	Metal	Large	Large						
Disconnect Option	64	Metal	Metal	Metal	Metal	Metal	Metal						
	80	Metal	Metal	Metal	Metal	Metal	Metal						
-	96	Metal	Metal	Metal	Metal	Metal	Metal						

**Small** 10" H x 8" W x 6" D

**Medium** 12" H x 10" W x 6" D

Large 16" H x 14" W x 8" D

**Metal** 30" H x 20" W x 8" D