

Engineered for efficiency, designed for durability

INDEECO

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.

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.

Catalog Numbering System for Cooling Tower Control Panels



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

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

874	Z-	XXX	A	B	C	D	-E
Product Code Number for Cooling Tower Control Panels	Agency Status	Control Type	Catalog Listed Option	Control type-Probe-Cable	Nominal Cord Length	Voltage/Phase Code	Options
	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 controller) Immersion Cord (DI)	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 *only available with digital controller

Control Panel Type	Max Panel KW Ratings								PCB Control Base Catalog Number (Add B, C, D & -E)	Digital Control Base Catalog Number (Add B, C, D & -E)
	Max Panel Amps	120V 1PH	208V 1PH	240V 1PH	480V 1PH	208V 3PH	240V 3PH	480V 3PH		
Standard Panel With No Options	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 ___
	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 ___
With Door Disconnect Option	16	1.9	3.3	3.8	7.6	5.7	6.6	13.3	874Z-2521 ___	874Z-3521 ___
	24	2.8	4.9	5.7	11.5	8.6	9.9	19.9	874Z-2531 ___	874Z-3531 ___
	32	3.8	6.6	7.6	15.3	11.5	13.2	26.5	874Z-2541 ___	874Z-3541 ___
	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 ___
With Fusing Option	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 ___
	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 Panel Type	Max Panel KW Ratings								PCB Control Base Catalog Number (Add B, C, D & -E)	Digital Control Base Catalog Number (Add B, C, D & -E)
	Max Panel Amps	120V 1PH	208V 1PH	240V 1PH	480V 1PH	208V 3PH	240V 3PH	480V 3PH		
With Circuit Breaker Option	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 ___
	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 ___
With Fusing and Door Disconnect Option	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 ___
	40	4.8	8.3	9.6	19.2	14.3	16.6	33.2	874Z-2234 ___	874Z-3234 ___
	48	5.7	9.9	11.5	23	17.2	19.9	39.8	874Z-2244 ___	874Z-3244 ___
	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 ___
With Circuit Breaker and Door Disconnect Option	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 ___
	40	4.8	8.3	9.6	19.2	14.3	16.6	33.2	874Z-2315 ___	874Z-3315 ___
	48	5.7	9.9	11.5	23	17.2	19.9	39.8	874Z-2325 ___	874Z-3325 ___
	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	Option A2	Option A3	Option A4	Option N	Option L
								These options only available with digital ctrl					
Standard Panel with No Options	16	Small	Small	Medium	Medium	Medium	Medium	Large	Large	Large			
	24	Small	Small	Medium	Medium	Medium	Medium	Large	Large	Large			
	32	Small	Small	Medium	Medium	Medium	Medium	Large	Large	Large			
	40	Small	Small	Medium	Medium	Medium	Medium	Large	Large	Large			
	48	Small	Small	Medium	Medium	Medium	Medium	Large	Large	Large			
With Door Disconnect Option	16	Small	Small	Medium	Medium	Medium	Medium	Large	Large	Large			
	24	Small	Small	Medium	Medium	Medium	Medium	Large	Large	Large			
	32	Small	Small	Medium	Medium	Medium	Medium	Large	Large	Large			
	40	Small	Small	Medium	Medium	Medium	Medium	Large	Large	Large			
	48	Medium	Medium	Medium	Medium	Medium	Medium	Large	Large	Large			
With Fusing Option	24	Medium	Large	Large	Large	Large	Large	No Change in Box	No Change in Box	No Change in Box	No Change in Box	No Change in Box	No Change in Box
	32	Large	Large	Large	Metal	Large	Large						
	40	Large	Large	Large	Metal	Large	Large						
	48	Large	Large	Large	Metal	Large	Large						
	64	Large	Metal	Metal	Metal	Metal	Metal						
	80	Large	Metal	Metal	Metal	Metal	Metal						
	96	Large	Metal	Metal	Metal	Metal	Metal						
With Circuit Breaker Option	24	Large	Large	Metal	Metal	Large	Large	No Change in Box	No Change in Box	No Change in Box	No Change in Box	No Change in Box	No Change in Box
	32	Large	Large	Metal	Metal	Large	Large						
	40	Large	Large	Metal	Metal	Large	Large						
	48	Large	Large	Metal	Metal	Large	Large						
	64	Metal	Metal	Metal	Metal	Metal	Metal						
	80	Metal	Metal	Metal	Metal	Metal	Metal						
	96	Metal	Metal	Metal	Metal	Metal	Metal						
With Fusing and Door Disconnect Option	24	Medium	Large	Large	Large	Large	Large	No Change in Box	No Change in Box	No Change in Box	No Change in Box	No Change in Box	No Change in Box
	32	Large	Large	Large	Metal	Large	Large						
	40	Large	Large	Large	Metal	Large	Large						
	48	Large	Large	Large	Metal	Large	Large						
	64	Metal	Metal	Metal	Metal	Metal	Metal						
	80	Metal	Metal	Metal	Metal	Metal	Metal						
	96	Metal	Metal	Metal	Metal	Metal	Metal						
With Circuit Breaker and Door Disconnect Option	24	Large	Large	Metal	Metal	Large	Large	No Change in Box	No Change in Box	No Change in Box	No Change in Box	No Change in Box	No Change in Box
	32	Large	Large	Metal	Metal	Large	Large						
	40	Large	Large	Metal	Metal	Large	Large						
	48	Large	Large	Metal	Metal	Large	Large						
	64	Metal	Metal	Metal	Metal	Metal	Metal						
	80	Metal	Metal	Metal	Metal	Metal	Metal						
	96	Metal	Metal	Metal	Metal	Metal	Metal						

Dimensional Reference

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
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