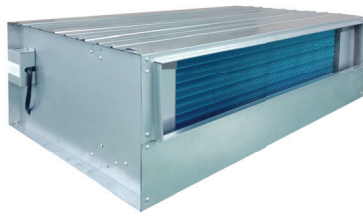


## 42CMS-W Series

*Chilled Water Fan Coil Unit  
Ceiling Concealed - Duct Type*  
Nominal : 400 - 2,000 CFM



## Features



### Give you design and equipment location flexibility

- Wide range of popular capacities for 400 - 2,000 cfm.
- Up to 8 sizes with Cabinet units.
- Select 3 or 4 row coils (008-020 model).
- Quiet operation

### Save operating costs with Carrier fan coils

- Individual unit shut off when not in use
- Efficient, 4 speed with High efficient BLDC motor
- High efficiency heat transfer surface

### Save you service and maintenance expense

- Insulated drain pan
- Easy access to components
- Rugged construction
- Factory leak test
- Long life, heavy duty bearings

## HIGH PERFORMANCE, ENERGY SAVINGS, PM2.5 & COMFORT

If Air side fan coil unit are the answer to your job requirements, you can't afford to pass over Carrier's versatile and extensive range of fan coil units.

With Carrier's 42CMS series fan coil units, in capacities from 400 to 2,000 cfm.

Units are ideal for installations in hospitals, hotels, apartments and other multiroom buildings. provide unsurpassed year round comfort with high cooling performance.

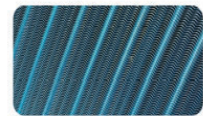
Carrier 42CMS series requires very little space and is easy to install. Piping, drain and wiring connections are readily accessible to save installation time and field labor expense.

### Select Carrier fan coils for easy, low cost installation

- Easy wiring, piping connections
- Mounting holes, slots speed hanging
- Requires no expensive ductwork
- Ideal for new construction or renovation

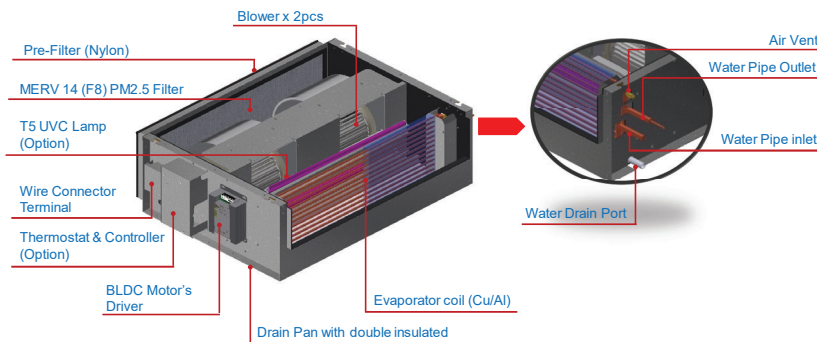
### Blue fin with Epoxy and Hydrophilic coating

- Prevents dirt from sticking to the fins
- Condensation water flows and water away dirt
- Anti-corrosion caused by oxidation
- Increases the efficiency of heat exchanger

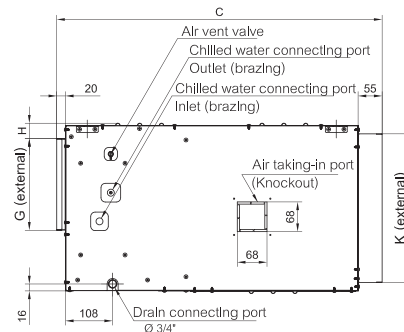
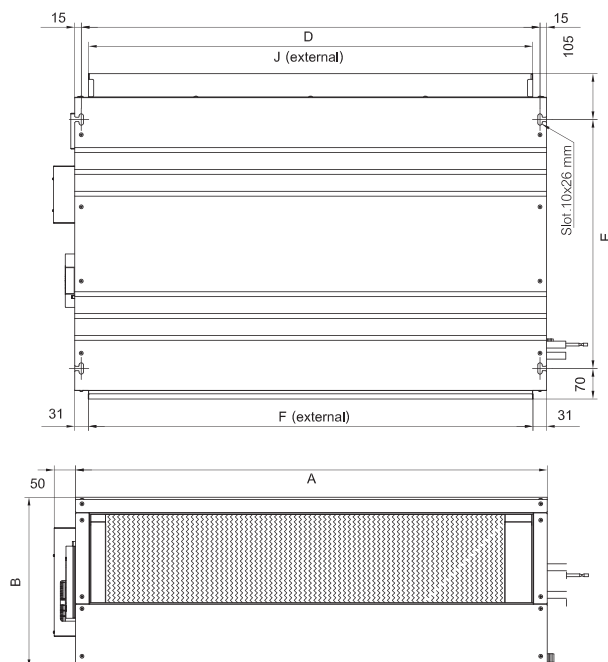


### MERV 14 (F8) PM2.5 Filter

- Easy Handling, installation and removal
- Available with anti-microbial
- 2" deep high efficiency and light weight
- For high quality air supply, creates more comfort and healthy environment.



## Dimension



MODEL	A	B	C	D	E	F	G	H	J	K
42CMS004W212RE	870	310	655	840	480	808	160	20	807	260
42CMS004W312RE	870	310	655	840	480	808	160	20	807	260
42CMS006W212RE	870	345	695	840	520	808	180	20	807	295
42CMS006W312RE	870	345	695	840	520	808	180	20	807	295
42CMS008W312RE	870	345	695	840	520	808	180	20	807	295
42CMS008W412RE	870	345	695	840	520	808	180	20	807	295
42CMS010W312RE	1000	360	695	970	520	938	180	20	937	310
42CMS010W412RE	1080	360	695	1050	520	1018	180	20	1017	310
42CMS012W312RE	1080	390	695	1050	520	1018	210	20	1017	340
42CMS012W412RE	1150	390	695	1120	520	1088	210	20	1087	340
42CMS014W312RE	1080	390	745	1050	570	1018	210	30	1017	340
42CMS014W412RE	1150	390	745	1120	570	1088	210	30	1087	340
42CMS016W312RE	1150	390	745	1120	570	1088	210	30	1087	340
42CMS016W412RE	1150	390	745	1120	570	1088	210	30	1087	340
42CMS020W312RE	1280	390	745	1250	570	1218	210	30	1217	340
42CMS020W412RE	1280	390	745	1250	570	1218	210	30	1217	340

UNIT IN mm

# 42CMS-W Sereis

## Specification

Description		Chilled Water Coil - Concealed Duct Type																
Model Name	42CMS	004W2	004W3	006W2	006W3	008W3	008W4	010W3	010W4	012W3	012W4	014W3	014W4	016W3	016W4	020W3	020W4	
Cooling Capacity	W	3,810	4,757	5,897	6,732	8,444	9,610	9,590	11,553	11,594	14,083	13,303	15,659	15,191	17,128	18,754	22,207	
	Btu/hr.	13,000	16,230	20,120	22,970	28,810	32,790	32,720	39,420	39,560	48,050	45,390	53,430	51,830	58,440	63,990	75,770	
Power Supply	V/Ph/Hz 220-240 Volt / 1 Phase / 50 Hz.																	
Power Consumption	W	97		163		254		326		373		414		397		431		
Operating Current	Amp.	0.74		1.19		1.78		2.23		2.52		2.80		2.68		2.91		
Indoor Air Circulation, Max.	m³/h	680		1,020		1,360		1,700		2,040		2,380		2,720		3,400		
	cfm	400		600		800		1,000		1,200		1,400		1,600		2,000		
Coil Face Velocity	fpm	276	250	269	269	356	356	417	377	415	383	424	447	447	498	495	495	
Sound pressure level (L/M/H/Turbo)	dBA	36 / 38 / 39 / 40		38 / 40 / 42 / 43		42 / 44 / 46 / 47		44 / 46 / 48 / 49		44 / 46 / 48 / 50		45 / 47 / 50 / 52		45 / 48 / 50 / 53		50 / 54 / 57 / 59		
Fan Motor	Type	Hi-Efficiency BLDC Motor																
	Q'ty	1		1		1		1		1		1		1		1		
Blower	Type	Double Inlet Centrifugal Forward Curve Blade																
	Dia. x Length	inch	7-3/8 x 5 (187 x 127 mm.)		6 x 8		6 x 8		8 x 9		8 x 9		9 x 9		9 x 9			
	Drive type	Direct		Direct		Direct		Direct		Direct		Direct		Direct		Direct		
	Q'ty	2		2		2		2		2		2		2		2		
Heat Exchanger	Face Area	Sq.m	0.135	0.149	0.207	0.207	0.209	0.209	0.223	0.246	0.268	0.291	0.307	0.291	0.333	0.291	0.375	0.375
		Sq.ft	1.450	1.600	2.230	2.230	2.250	2.250	2.400	2.650	2.890	3.130	3.300	3.130	3.580	3.130	4.040	4.040
	Row	2		3	2	3	3	4	3	4	3	4	3	4	3	4	4	
	Tube size / type	Copper tube 7.00 mm. / Smooth																
	Fin per Inch	18	16	18	16	16	16	16	16	16	16	16	16	16	16	16	16	
	Fin Material type	Aluminium (Blue) Fin type																
Medium Filter size	mm	255 x 800 x 48		290 x 800 x 48		290 x 800 x 48		305 x 930 x 48		305 x 1,010 x 48		335 x 1,010 x 48		335 x 1,080 x 48		335 x 1,210 x 48		
Net weight	kg.	27	28	32	33	36	37	38	39	41	42	43	47	46	47	49	51	
Connecting Pipe	Water Inlet	inch	5/8		5/8		5/8		5/8		5/8		3/4		3/4		3/4	
	Water Outlet	inch	5/8		5/8		5/8		5/8		5/8		3/4		3/4		3/4	
	Water connecting type	Brazing		Brazing		Brazing		Brazing		Brazing		Brazing		Brazing		Brazing		
	Drain O.D.	inch	3/4		3/4		3/4		3/4		3/4		3/4		3/4		3/4	
Remark :	Nominal capacity are base on air entering temp. 80 degree Fwb / 67 degree Fdb , Entering/Leaving water temp. 44/54 degree F , at max air flow rate																	

## Performance data

MODEL	Entering Chilled Water Temp.	Entering Air Temp ( Fdb / Fwb )															
		76 / 63				78 / 65				80 / 67				82 / 69			
		Total Capacity	Sensible Capacity	Chilled Water Flowrate	Water Pressure Drop	Total Capacity	Sensible Capacity	Chilled Water Flowrate	Water Pressure Drop	Total Capacity	Sensible Capacity	Chilled Water Flowrate	Water Pressure Drop	Total Capacity	Sensible Capacity	Chilled Water Flowrate	Water Pressure Drop
		F	btu/h	btu/h	gpm	ft.wg.	btu/h	btu/h	gpm	ft.wg.	btu/h	btu/h	gpm	ft.wg.	btu/h	btu/h	gpm
42CMS004W2	40	12,200	9,700	2.44	7.6	14,100	10,300	2.82	9.6	16,200	11,000	3.24	12.3	18,400	11,600	3.67	15.3
	45	9,400	8,300	1.87	4.7	10,700	8,800	2.14	6.0	12,300	9,300	2.46	7.7	14,500	10,000	2.89	10.0
	50	6,900	6,900	1.38	2.8	7,800	7,400	1.56	3.5	9,200	8,000	1.84	4.6	10,700	8,500	2.13	5.9
42CMS004W3	40	15,500	11,400	3.08	8.4	17,700	12,200	3.53	10.7	20,200	13,000	4.02	13.3	22,700	13,800	4.52	16.5
	45	11,700	9,700	2.33	5.3	13,600	10,400	2.72	6.8	15,800	11,000	3.14	8.7	18,300	11,800	3.64	11.3
	50	8,400	8,100	1.68	3.0	9,800	8,700	1.96	3.8	11,600	9,300	2.32	5.2	13,700	10,000	2.74	6.9
42CMS006W2	40	19,000	14,800	3.78	11.1	21,800	15,800	4.35	14.3	25,000	16,800	4.99	18.0	28,400	17,800	5.65	22.5
	45	14,400	12,700	2.88	6.9	16,600	13,500	3.31	8.8	19,200	14,300	3.83	11.4	22,400	15,300	4.47	14.9
	50	10,600	10,500	2.11	4.1	12,100	11,400	2.42	5.2	14,200	12,200	2.84	6.8	16,500	13,000	3.30	8.8
42CMS006W3	40	21,900	16,500	4.36	7.0	25,000	17,500	4.98	8.8	28,500	18,600	5.67	11.1	32,100	19,700	6.40	13.8
	45	16,500	14,000	3.29	4.3	19,200	15,000	3.84	5.6	22,200	15,900	4.43	7.3	25,600	17,000	5.11	9.3
	50	12,000	11,700	2.39	2.4	13,900	12,600	2.78	3.2	16,300	13,500	3.26	4.3	19,200	14,400	3.84	5.6
42CMS008W3	40	26,900	21,100	5.36	6.3	30,900	22,400	6.15	8.0	35,300	23,800	7.03	10.1	40,100	25,200	7.99	12.7
	45	20,100	17,900	4.01	3.8	23,300	19,100	4.66	5.0	27,200	20,300	5.43	6.5	31,600	21,700	6.30	8.4
	50	14,800	14,700	2.95	2.1	16,900	16,000	3.38	2.8	19,800	17,200	3.96	3.7	23,300	18,400	4.65	5.0
42CMS008W4	40	30,600	22,800	6.09	7.6	34,900	24,200	6.94	9.6	39,600	25,700	7.88	12.0	44,600	27,200	8.88	14.7
	45	23,100	19,400	4.61	4.7	26,900	20,600	5.36	6.1	31,100	22,000	6.20	7.9	35,800	23,400	7.14	10.0
	50	16,700	16,200	3.34	2.6	19,500	17,400	3.90	3.5	22,900	18,600	4.58	4.6	26,900	19,800	5.38	6.1
42CMS010W3	40	30,800	24,400	6.13	6.0	35,200	25,800	7.01	7.6	40,300	27,400	8.03	9.6	45,800	29,100	9.13	12.1
	45	23,100	20,700	4.61	3.7	26,700	22,100	5.34	4.7	31,100	23,500	6.21	6.1	36,000	25,000	7.17	7.9
	50	17,000	17,000	3.40	2.1	19,500	18,500	3.89	2.7	22,800	20,000	4.55	3.6	26,700	21,300	5.32	4.7
42CMS010W4	40	37,200	27,900	7.40	6.7	42,300	29,600	8.42	8.3	48,100	31,500	9.58	10.5	54,300	33,300	10.81	12.9
	45	28,000	23,700	5.59	4.1	32,500	25,300	6.48	5.3	37,700	27,000	7.53	6.9	43,300	28,600	8.64	8.7
	50	20,300	19,900	4.06	2.2	23,600	21,400	4.71	3.0	27,800	22,800	5.55	4.0	32,500	24,300	6.50	5.3
42CMS012W3	40	37,200	29,400	7.41	7.1	42,800	31,200	8.53	9.1	48,800	33,100	9.72	11.5	55,500	35,100	11.05	14.3
	45	28,000	25,000	5.59	4.4	32,500	26,700	6.48	5.6	37,600	28,400	7.51	7.3	43,700	30,200	8.71	9.5
	50	20,600	20,600	4.12	2.5	23,700	22,400	4.74	3.3	27,600	24,000	5.52	4.3	32,300	25,700	6.46	5.6
42CMS012W4	40	44,800	33,600	8.93	4.3	51,000	35,700	10.17	5.4	58,400	38,000	11.62	6.9	65,900	40,300	13.13	8.5
	45	33,400	28,400	6.66	2.6	39,200	30,400	7.81	3.4	45,600	32,500	9.10	4.5	52,500	34,600	10.48	5.7
	50	24,000	23,600	4.80	1.3	27,900	25,400	5.57	1.8	33,200	27,300	6.63	2.6	39,400	29,300	7.87	3.5
42CMS014W3	40	42,800	34,000	8.52	6.0	49,100	36,000	9.78	7.7	56,200	38,300	11.19	9.7	63,800	40,500	12.71	12.2
	45	32,100	28,900	6.41	3.7	37,300	30,800	7.45	4.8	43,200	32,800	8.61	6.2	50,200	34,900	10.02	8.0
	50	23,700	23,700	4.74	2.1	27,300	25,900	5.45	2.8	31,600	27,800	6.31	3.6	37,200	29,700	7.43	4.8
42CMS014W4	40	49,900	38,000	9.94	5.2	56,800	40,200	11.31	6.6	65,000	42,800	12.95	8.3	73,600	45,400	14.66	10.3
	45	37,400	32,200	7.46	3.2	43,500	34,300	8.68	4.1	50,700	36,700	10.11	5.4	58,300	39,000	11.64	6.9
	50	27,000	26,800	5.39	1.7	31,200	28,800	6.23	2.3	37,100	31,000	7.40	3.1	43,600	33,100	8.72	4.2
42CMS016W3	40	48,700	38,600	9.69	8.1	56,000	41,000	11.15	10.4	64,000	43,500	12.74	13.1	72,600	46,100	14.45	16.4
	45	36,700	32,900	7.32	5.0	42,600	35,100	8.50	6.5	49,100	37,200	9.80	8.3	57,200	39,700	11.42	10.8
	50	27,200	27,200	5.44	2.9	31,200	29,500	6.22	3.8	36,100	31,600	7.20	4.9	42,400	33,800	8.47	6.4
42CMS016W4	40	54,700	42,100	10.89	6.1	62,300	44,600	12.41	7.7	71,400	47,500	14.22	9.8	80,900	50,300	16.11	12.1
	45	41,100	35,800	8.20	3.7	47,600	38,100	9.49	4.8	55,400	40,700	11.06	6.3	63,900	43,200	12.75	8.1
	50	29,700	29,700	5.94	2.0	34,500	32,200	6.90	2.8	40,600	34,400	8.10	3.7	47,600	36,700	9.50	4.8
42CMS020W3	40	60,100	47,700	11.97	10.5	68,800	50,500	13.71	13.4	79,000	53,600	15.73	17.0	89,500	56,800	17.83	21.2
	45	45,200	40,700	9.02	6.4	52,500	43,300	10.48	8.3	60,700	46,100	12.11	10.8	70,400	48,900	14.05	14.0
	50	33,800	33,800	6.74	3.9	38,500	36,500	7.69	4.9	44,500	39,100	8.89	6.3	52,300	41,700	10.45	8.3
42CMS020W4	40	70,800	53,900	14.11	8.5	80,800	57,100	16.08	10.7	92,300	60,800	18.39	13.5	104,300	64,400	20.77	16.8
	45	53,300	45,800	10.64	5.2	61,900	48,800	12.34	6.7	71,900	52,000	14.34	8.8	82,900	55,400	16.54	11.2
	50	38,800	38,200	7.76	3.0	44,800	41,100	8.95	3.8	52,700	44,000	10.52	5.1	62,000	47,000	12.39	6.8



## Accessories (Optional) ▶

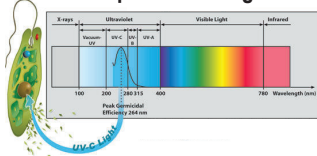
### UV Lamps

In response to the current coronavirus epidemic situation, sterilization option using UltraViolet (UV) is available for FCU products.

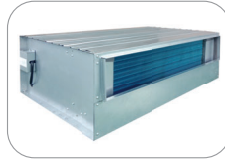
UV light kill germs in a wide range of wavelengths between 200 to 400 (nm) which is highly effective in killing bacteria and reduces the formation of viruses by breaking down the molecular bonds that hold their DNA and RNA together.

UV-C at this wavelength, is the wavelength that DNA can absorb well can be punched and disabled their growth. By destroying their DNA sequence When doing this, the virus will lose their ability to reproduce.

#### The Spectrum of Light



UV-C-Radiation used for disinfection is most effective at a wavelength of 253.7 nm.



UV-C rays are not found in nature because these rays cannot pass through the ozone layer to the earth's surface.

The use of this type of radiation to destroy the infection requires a source of radiation. Including mercury lamps

### Advantages of UV-C lamp

- 253.7nm UV-C lamp, no generate ozone.
- Plug-in products for easy installation.
- High-energy UV-C, effective life is up to 8000 hours.
- External control box, 220VAC standard power supply, simple wiring.
- Stainless steel reflector enhances the radiation intensity and avoids direct exposure to the human body.
- Able to kill bacteria in the air and prevent the virus from spreading through the host bacteria.

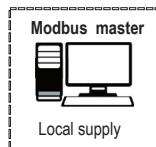
### UVC LAMP DATA

MODEL	HEAT EXCHANGER (mm.)		UVC LAMP Model	DISINFECTION At COIL SURFACE	IRRADIANCE	
	Height	Length			Min (uW/CM <sup>2</sup> )	Max (uW/CM <sup>2</sup> )
42CMS004W212_E	1,890	7,112	PL-L / 55W	> 99.99%	632.16	1,735.33
42CMS004W312_E	2,100	7,112	PL-L / 55W	> 99.99%	441.04	1,192.75
42CMS006W212_E	2,940	7,112	PL-L / 55W	> 99.99%	433.97	1,425.92
42CMS006W312_E	2,940	7,112	PL-L / 55W	> 99.99%	433.97	1,425.92
42CMS008W312_E	2,940	7,112	PL-L / 55W	> 99.99%	433.97	1,425.92
42CMS008W412_E	2,940	7,112	PL-L / 55W	> 99.99%	433.97	1,425.92
42CMS010W312_E	2,940	7,620	PL-L / 55W	> 99.99%	414.08	1,425.92
42CMS010W412_E	2,940	8,382	PL-L / 55W	> 99.99%	386.25	1,425.92
42CMS012W312_E	2,940	9,144	T5 75W / 85cm.	> 99.99%	379.95	1,499.82
42CMS012W412_E	2,940	9,906	T5 75W / 85cm.	> 99.99%	363.34	1,499.82
42CMS014W312_E	3,360	9,144	T5 75W / 85cm.	> 99.99%	367.36	1,347.81
42CMS014W412_E	2,940	9,906	T5 75W / 85cm.	> 99.99%	363.34	1,499.82
42CMS016W312_E	3,360	9,906	T5 75W / 85cm.	> 99.99%	367.36	1,347.81
42CMS016W412_E	2,940	9,906	T5 75W / 85cm.	> 99.99%	363.34	1,499.82
42CMS020W312_E	3,360	11,176	T5 75W / 85cm.	> 99.99%	315.13	1,347.81
42CMS020W412_E	3,360	11,176	T5 75W / 85cm.	> 99.99%	315.13	1,347.81

### BAS controller (Option)

#### Model CARR-INTM9DT09X

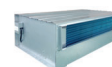
- Open communication protocol Modbus RS-485
- Manages the DC motor or EC motor
- Manages the valve actuator proportional type
- External contract for key card ON-OFF



RS-485 MAX 246 Indoor / group



CARR-INTDT09



CARR-INTDT09



CARR-INTDT09



CARR-INTDT09

### Controller

Control box and cable set 4 meters, not exceeding 2,000 CFM Model (1 Motor)



CARR-INTM9BOX1M  
THERMOSTAT PCB9 BOX 1 MOTOR



CARR-INTMXDT09-UV  
CONTROL(DT09)+WIRE REMOTE UV



CARR-INTM9DT09X  
CONTROLLER PCB9 WIFI+MODBUS



CARR-INTLCD54  
Wireless remote control



CARR-INTLCD54-UV  
Wireless remote control+UV



CARR-INTDT09  
Wired remote control (Option-1)



CARR-INTDT09-WIFI  
Wired remote control (Option-2)

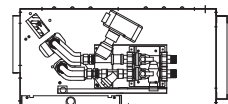
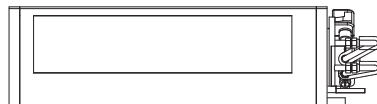


CCARR-INTDT09-UV  
Wired remote control (Option-3)

### Built in PICV (Option)

Factory assembled nest of valves and accessories help installers avoid installation mistakes onsite.

PICV with cabinet ▶



### บริษัท แคนเรีย (ประเทศไทย) จำกัด

1858/63-74 ชั้น 14, 15  
ถ.เทพรัตน กม. 4.5 แขวงบางนาใต้  
เขตบางนา กรุงเทพฯ 10260  
โทร. 0-2090-9999 แฟกซ์: 0-2751-4778

### Carrier (Thailand) Ltd.

1858/63-74 , 14<sup>th</sup>, 15<sup>th</sup> Floor,  
Debaratna Road, Km.4.5, Bangna Tai,  
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บริษัทฯ ขอสงวนสิทธิ์ที่จะเปลี่ยนแปลงรายละเอียดข้างต้น โดยไม่ต้องแจ้งให้ทราบล่วงหน้า  
Carrier reserves the right to make changes in specifications without prior notice.



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