



**HACST**

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2.1 low temperature reduction DFN series square counterflow FRP cooling tower parameters

Type	$\tau=28^{\circ}\text{C}$ water flow rate (m <sup>3</sup> /h)		$\tau=27^{\circ}\text{C}$ water flow rate (m <sup>3</sup> /h)		Size (mm)		Air volume (m <sup>3</sup> /h)	Fan Dia. (mm)	Motor Power (kW)	Intake XportDN (mm)				Weight (kg)		Inlet water pressure kpa	Noise Level dB(A)			Dm
	$\Delta t=5^{\circ}\text{C}$	$\Delta t=8^{\circ}\text{C}$	$\Delta t=5^{\circ}\text{C}$	$\Delta t=8^{\circ}\text{C}$	Height	Max.Dia.				In/Out	Over flow	Drain flow	Make up	N.W	Operatin g Weight		Dm	10m	16m	
DFNDP-20	20	14.8	22.8	17.6	2850	1150	12000	900	1.1	65	40	40	20	0.35	1.1	23	58	50	45	1.3
DFNDP-30	30	22.2	34.2	26.4	2850	1150	18000	900	1.5	65	40	40	20	0.38	1.13	23	58	50	45	1.3
DFNDP-40	40	29.6	45.6	35.2	2850	1480	20000	900	1.5	80	40	40	20	0.41	1.18	23	58	50	45	1.68
DFNL -50					2940									0.48	0.87					
DFNDP-50	50	37	57	44	3320	1700	36000	1200	1.5	80	50	40	20	0.55	1.24	26	58	50	45	2
DFNGP-50					3640									0.64	1.68					
DFNL -65					2940									0.53	0.91					
DFNDP-65	65	48.3	77	55.9	3320	1900	43400	1200	2.2	100	50	40	20	0.62	1.4	26	58	50	45	2.26
DFNGP-65					3640									0.75	1.9					
DFNL -80					3230									0.58	0.94					
DFNDP-80	80	61	92	70	3690	2160	45000	1200	3	100	50	50	20	0.69	1.55	31	59	52	46	3
DFNGP-80					3990									0.85	2.12					
DFNL -100					3830									1.25	1.9					
DFNDP-100	100	74.4	118.7	86	4390	2400	79000	1800	4	125	80	50	25	1.32	3.42	43	59	62	47	3.02
DFNGP-100					4690									1.93	3.95					
DFNL -125					3830									1.35	1.55					
DFNDP-125	125	93	148.4	107.5	4390	2700	100000	2200	4	150	80	50	25	1.42	3.52	44	59	62	47	3.02
DFNGP-125					4690									2.03	4.15					
DFNL -150					4050									2.08	3.32					
DFNDP-150	150	109.8	175.1	126.9	4670	3000	115000	2200	5.5	150	80	50	25	2.32	5.07	45	60.5	54	50.6	3.47
DFNGP-150					4970									2.64	7.63					
DFNL -175					4050									2.23	3.65					
DFNDP-175	175	128.1	204.3	148	4670	3200	125000	2200	5.5	200	80	50	25	2.58	5.86	46	60.5	54	50.6	3.73
DFNGP-175					4970									3.09	9.1					
DFNL -200					4340									2.48	4.13					
DFNDP-200	200	148.9	237.4	172.1	4960	3400	140000	2500	7.5	200	80	50	25	2.84	6.66	47	62	55.6	52.3	3.95
DFNGP-200					5260									3.55	10.56					
DFNL -225					4360									2.75	5.23					
DFNDP-225	225	167.5	267	193.6	4980	3600	160000	2500	7.5	200	80	50	40	3.1	6.85	47	62	55.6	52.3	4.15
DFNGP-225					5280									3.76	10.76					
DFNL -250					4660									2.81	5.46					
DFNDP-250	250	186.1	296.8	215.1	5200	3800	175000	2500	7.5	200	80	50	40	3.36	7.36	47	62	55.6	52.3	4.4
DFNGP-250					5580									3.93	11.68					
DFNL -300					5010									2.94	5.88					
DFNDP-300	300	224.9	350.6	258.3	5690	4100	220000	2950	11	250	80	50	40	3.52	9.48	47	62	57.6	54.5	4.63
DFNGP-300					5990									4.13	14.79					
DFNL -350					5070									3.15	6.36					
DFNDP-350	350	262.4	409	301.35	5750	4500	240000	2950	11	250	100	50	50	3.58	9.65	53	62	57.6	54.5	5.1
DFNGP-350					6050									4.35	15.7					
DFNL -400					5300									3.71	7.14					
DFNDP-400	400	299.9	476.4	344.4	6040	4800	280000	3400	15	250	100	50	50	4.27	10.57	53	62.5	58.8	55.7	5.51
DFNGP-400					6340									4.87	18.02					
DFNL -450					5300									3.95	7.38					
DFNDP-450	450	337.38	536	387.5	6040	5100	320000	3400	15	250	100	50	50	4.39	11.68	53	62.5	58.8	55.7	5.77
DFNGP-450					6340									5.26	18.6					
DFNL -500					5900									4.62	8.85					
DFNDP-500	500	374.9	584.3	430.4	6700	5300	350000	3600	15	300	100	50	50	5.3	13.11	57	62.5	59.3	56.2	6.08
DFNGP-500					7000									6.04	19.7					
DFNL -600					6140									5.89	11.3					
DFNDP-600	600	448.5	698.9	514.9	6980	6000	395000	3600	18.5	300	100	50	50	6.77	22.56	57	62.5	60.5	57.4	6.88
DFNGP-600					7280									7.95	28.13					
DFNL -700					6140									6.56	12.3					
DFNDP-700	700	523.3	815	601	6980	6600	47000	4200	22	300	100	80	50	7.33	22.86	60	62.5	60.5	57.4	7.46
DFNGP-700					7280									8.3	30.28					
DFNL -750					6440									7.56	14.5					
DFNDP-750	750	561.7	875.3	644.9	7290	6800	47000	4200	22	350	100	80	50	8.68	23.51	60	63	61.4	58.4	7.79
DFNGP-750					7590									9.68	36.04					
DFNL -800					6440									7.92	15.1					
DFNDP-800	800	600	933.7	687.9	7290	6900	530000	4200	22	350	100	80	50	9.3	24.2	60	63	61.4	58.4	7.95
DFNGP-800					7590									10.26	37.1					
DFNL -900					6950									8.75	16.76					
DFNDP-900	900	673.4	1049.5	773.2	7900	7200	600000	4200	30	350	100	80	50	10.05	25.46	60	63.8	62.9	60	8.36
DFNGP-900					8200									11.15	38.13					
DFNL -1050					7150									10.57	19.97					
DFNDP-1050	1050	786.6	1225.9	903.1	8100	7600	670000	4700	37	400	100	80	50	12.05	31.82	60	64.6	63.1	53.9	8.93
DFNGP-1050					8400									13.25	48.14					

Instruction :

1. What is listed in this table is that under the working conditions of wet bulb temperature  $\tau=28^{\circ}\text{C}$  and  $\tau=27^{\circ}\text{C}$ , when  $\Delta t=5^{\circ}\text{C}$ ,  $t_1=37^{\circ}\text{C}$ ,  $t_2=32^{\circ}\text{C}$ ; when  $\Delta t=8^{\circ}\text{C}$ ,  $t_1=40^{\circ}\text{C}$ ,  $t_2=\text{cooling water volume at } 32^{\circ}\text{C}$ .

2. The noise value in the table is the value when the motor is running at low speed at night and equipped with a dripping sound-absorbing pad. Without the dripping sound-absorbing pad, the value will be 5dB (A) higher than the value in the table.

2.2 Medium and high temperature reduction GFN series square counterflow cooling tower parameters

Parameter Type	$\tau=28^{\circ}\text{C}$ Water flow rate (m <sup>3</sup> /h)			$\tau=27^{\circ}\text{C}$ Water flow rate (m <sup>3</sup> /h)			Size (mm)		Air volume (m <sup>3</sup> /h)	Fan Dia. (mm)	Motor power (KW)	Intake XportDN (mm)				Weight (kg)		Inlet water pressure kpa	Noise Level dB(A)			Dm
	$\Delta t=10^{\circ}\text{C}$	$\Delta t=20^{\circ}\text{C}$	$\Delta t=25^{\circ}\text{C}$	$\Delta t=10^{\circ}\text{C}$	$\Delta t=20^{\circ}\text{C}$	$\Delta t=25^{\circ}\text{C}$	Height	Max. Dia.				In/Out	Over flow	Drain flow	Make up	N. W	Operatin g Weight		Dm	10m	16m	
GFNDP-20	20	18.22	18	22.84	20	19.59	2850	1150	18000	900	1.5	65	40	40	20	0.38	1.13	23	58	50	45	1.3
GFNL-30	30	27.36	27.13	34.29	29.91	29.41	2940	1700	36000	1200	1.5	65	40	40	20	0.48	0.87	26	58	50	45	2
GFNDP-30							3320									0.55	1.24					
GFNGP-30							3640									0.64	1.68					
GFNL-40	40	36.44	36.1	45.67	39.83	39.18	2940	1900	43400	1200	2.2	80	40	40	20	0.53	0.91	26	58	50	45	2.26
GFNDP-40							3320									0.62	1.4					
GFNGP-40							3640									0.75	1.9					
GFNL-50	50	45.52	45.15	57.05	49.76	48.94	3230	2160	45000	1200	3	80	50	40	20	0.58	0.94	31	59	52	46	3
GFNDP-50							3690									0.69	1.55					
GFNGP-50							3990									0.85	2.12					
GFNL-70	70	63.8	63.27	79.96	69.74	68.59	3830	2400	79000	1800	4	100	50	50	20	1.25	1.45	43	59	62	47	3.02
GFNDP-70							4390									1.32	3.42					
GFNGP-70							4690									1.93	3.95					
GFNL-100	100	89.2	87.7	115	98.1	95.7	4050	3000	115000	2200	5.5	125	80	50	25	2.08	3.32	45	60.5	54	50.6	3.47
GFNDP-100							4670									2.32	5.07					
GFNGP-100							4970									2.64	7.63					
GFNL-125	125	111.5	109.6	143.8	122.6	119.6	4050	3200	125000	2200	5.5	150	80	50	25	2.23	3.65	46	60.5	54	50.6	3.73
GFNDP-125							4670									2.58	5.86					
GFNGP-125							4970									3.09	9.1					
GFNL-150	150	137.4	136.2	172.2	150.2	147.7	4340	3400	140000	2500	7.5	150	80	50	25	2.48	4.13	47	62	55.6	52.3	3.95
GFNDP-150							4960									2.84	6.66					
GFNGP-150							5260									3.55	10.56					
GFNL-175	175	160.3	158.9	200.9	175.2	172.3	4660	3800	175000	2500	7.5	200	80	50	25	2.81	5.46	47	62	55.6	52.3	4.4
GFNDP-175							5200									3.36	7.36					
GFNGP-175							5580									3.93	11.68					
GFNL-200	200	182.8	181.3	229.1	199.8	196.5	5010	4100	220000	2950	11	200	80	50	25	2.94	5.88	47	62	57.6	54.5	4.63
GFNDP-200							5690									3.52	9.48					
GFNGP-200							5990									4.13	14.79					
GFNL-225	225	205.7	204	257.7	224.8	221	5070	4500	240000	2950	11	200	80	50	40	3.15	6.36	53	62	57.6	54.5	5.1
GFNDP-225							5750									3.58	9.65					
GFNGP-225							6050									4.35	15.7					
GFNL-250	250	228.2	226.3	286	249.4	245.3	5300	4800	280000	3400	15	200	80	50	40	3.71	7.14	53	62.5	58.8	55.7	5.51
GFNDP-250							6040									4.27	10.57					
GFNGP-250							6340									4.87	18.02					
GFNL-275	275	251	248.9	314.6	274.3	269.8	5300	5100	320000	3400	15	200	80	50	40	3.95	7.38	53	62.5	58.8	55.7	5.77
GFNDP-275							6040									4.39	11.68					
GFNGP-275							6340									5.26	18.6					
GFNL-300	300	273.6	271.3	342.9	299.1	294.1	5300	5100	320000	3400	15	250	80	50	40	3.95	7.38	53	62.5	58.8	55.7	5.77
GFNDP-300							6040									4.39	11.68					
GFNGP-300							6340									5.26	18.6					
GFNL-350	350	319.2	316.5	400	348.95	343.1	5900	5300	350000	3600	15	250	100	50	50	4.62	8.85	57	62.5	59.3	56.2	6.08
GFNDP-350							6700									5.3	13.11					
GFNGP-350							7000									6.04	19.7					
GFNL-400	400	364.4	361.4	456.7	398.3	391.8	6140	6000	395000	3600	18.5	250	100	50	50	5.89	11.3	57	62.5	60.5	57.4	6.88
GFNDP-400							6980									6.77	22.56					
GFNGP-400							7280									7.95	28.13					
GFNL-450	450	410	406.6	513.8	448	440.8	6140	6600	47000	4200	22	250	100	50	50	6.56	12.3	60	62.5	60.5	57.4	7.46
GFNDP-450							6980									7.33	22.86					
GFNGP-450							7280									8.3	30.28					
GFNL-500	500	455.2	451.5	570.5	497.6	489.4	6440	6800	47000	4200	22	300	100	50	50	7.56	14.5	60	63	61.4	58.4	7.79
GFNDP-500							7290									8.68	23.51					
GFNGP-500							7590									9.68	36.04					
GFNL-550	550	500.7	496.7	627.6	547.4	538.3	6440	6900	530000	4200	22	300	100	50	50	7.92	15.1	60	63	61.4	58.4	7.95
GFNDP-550							7290									9.3	24.2					
GFNGP-550							7590									10.26	37.1					
GFNL-600	600	546	541.5	684.3	596.9	587.1	6950	7200	600000	4200	30	300	100	50	50	8.75	16.76	60	63.8	62.9	60	8.36
GFNDP-600							7900									10.05	25.46					
GFNGP-600							8200									11.15	38.13					
GFNL-700	700	638	632.7	799.6	697.4	685.9	7150	7600	670000	4700	37	350	100	80	50	10.57	19.97	60	64.6	63.1	53.9	8.93
GFNDP-700							8100									12.05	31.82					
GFNGP-700							8400									13.25	48.14					

Instruction :

1. What is listed in this table is that under the working conditions of wet bulb temperature  $\tau=28^{\circ}\text{C}$  and  $\tau=27^{\circ}\text{C}$ , when  $\Delta t=5^{\circ}\text{C}$ ,  $t_1=37^{\circ}\text{C}$ ,  $t_2=32^{\circ}\text{C}$ ; when  $\Delta t=8^{\circ}\text{C}$ ,  $t_1=40^{\circ}\text{C}$ ,  $t_2=\text{cooling water volume at } 32^{\circ}\text{C}$ .

2. The noise value in the table is the value when the motor is running at low speed at night and equipped with a dripping sound-absorbing pad. Without the dripping sound-absorbing pad, the value will be 5dB (A) higher than the value in the table.

### 2.3 GFNL Series steel frame square counter flow cooling tower parameters

参数 型号	Water flow rate m <sup>3</sup> /h	Fan Dia. mm	Motor Power KW	Fan rotor speed	Fan model	Fan Volume m <sup>3</sup> /h	Total pressure Pa	Static pressure Pa	Inlet water pressure	Length mm	Width mm	Height mm	In/out pipe DN (mm)	N. W T	Operatin g Weight T	Noise dB(A)
GFNL- 800	800	4700	30	240	F47	62X10 <sup>4</sup>	132	98	66	8400	8400	8350	250X2	10.43	31.5	75
GFNL-1000	1000	4700	37	240	F47	78X10 <sup>4</sup>	148	95	66	9400	9400	8850	300X2	11.5	45.2	75
GFNL-1200	1200	5460	45	165	F55	93X10 <sup>4</sup>	148	95	68	10400	10400	10200	350X2	12.37	48.4	75
GFNL-1500	1500	6000	55	165	F60	120X10 <sup>4</sup>	157	110	71	11200	11200	10650	350X2	13.46	54.5	75
GFNL-2000	2000	7000	75	149	F70	160X10 <sup>4</sup>	160	110	76	13000	13000	12100	400X2	15.3	62.6	78
GFNL-2500	2500	8000	90	149	F80	200X10 <sup>4</sup>	164	110	80	14400	14400	12800	450X2	19.43	71.7	78
GFNL-3000	3000	8500	110	149	F85	218X10 <sup>4</sup>	170	120	84	16000	16000	13100	500X2	23.8	88.4	79
GFNL-3500	3500	8500	132	149	F85	240X10 <sup>4</sup>	170	116	87	17000	17000	15400	500X2	26.64	94.7	79
GFNL-4000	4000	9140	160	110	F92	252X10 <sup>4</sup>	170	120	90	18000	18000	16990	600X2	38.14	102.5	79
GFNL-4500	4500	9140	185	110	F92	282X10 <sup>4</sup>	170	120	93	18800	18000	14400	600X2	41.6	112.8	80
GFNL-5000	5000	10000	200	110	F100	315X10 <sup>4</sup>	170	120	96	19800	18800	14400	600X2	45.8	129.6	80

#### Instruction :

1. What is listed in this table is that under the working conditions of wet bulb temperature  $\tau=28^{\circ}\text{C}$  and  $\tau=27^{\circ}\text{C}$ , when  $\Delta t=5^{\circ}\text{C}$ ,  $t_1=37^{\circ}\text{C}$ ,  $t_2=32^{\circ}\text{C}$ ; when  $\Delta t=8^{\circ}\text{C}$ ,  $t_1=40^{\circ}\text{C}$ ,  $t_2=\text{cooling water volume at } 32^{\circ}\text{C}$ .
2. The noise value in the table is the value when the motor is running at low speed at night and equipped with a dripping sound-absorbing pad. Without the dripping sound-absorbing pad, the value will be 5dB (A) higher than the value in the table.