GF series of dry cooling fan

User’s manual

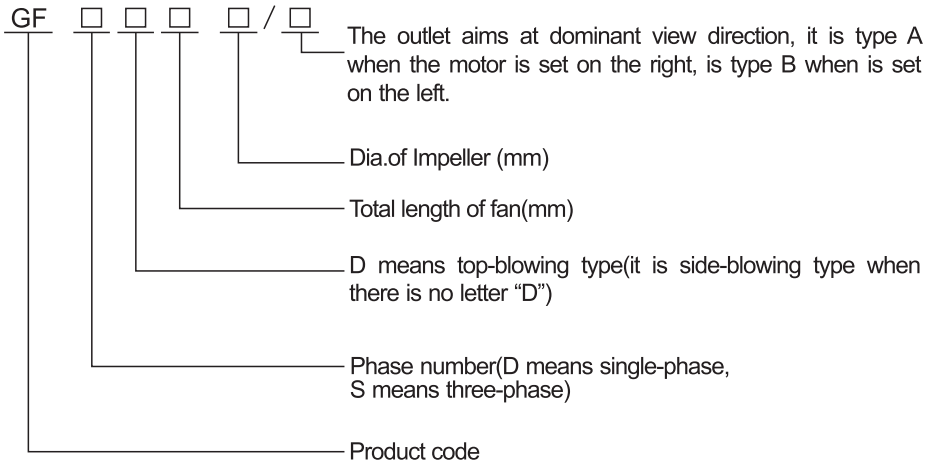
1. Use and characteristics

GF series cross-flow cooling fan for dry type transformer(hereinafter referred to as dry type transformer purposed cooling fan) is mainly used to increase cooling capacity of dry type transformer, and cool down temperature of electronic equipment,electric power distribution cabinet ,HV/LV switch cabinet and so on.It is able to improve the output power of dry type transformer by 40-50% by using this series of cooling fans, sharply improve dry type transformer's carrying capacity and prolong its service life. As one of the most economical and effective modes, the products are widely used by factories at home and abroad.

2. Working principle

When the GF series cooling fans are applied to dry type transformer,the fans should be set at two sides of transformer coil at the lower part,they blow the cool wind into the HV/LV cooling channels of transformer coil directly, the heat dissipation efficiency is very obvious, they guarantee normal running of transformer and prolong its service life.(Functions like ON/OFF of fan, over temperature alarm and over-temperature tripping of transformer, ect, can be provided by temperature control device).

3. Model description



4. Main technical parameters of top(side)blowing type fan

Model	Motor parameter						Air delivery ≧M/H	Noise ≤db	Transformer capacity matched KVA	Number for each set
	phase nos	voltage V	current ≤A	Rotary speed R/MIN	Frequency Hz	power W				
GFD(S)D365-90	single /three	220/ 380	0. 16 0. 09	1300	50	35	450	52		
GFD(S)D385-90	single /three	220/ 380	0. 16 0. 09	1300	50	35	500	52		
GFD(S)D440-90	single /three	220/ 380	0. 16 0. 09	1300	50	35	600	52		
GFD(S)D470-90	single /three	220/ 380	0. 16 0. 09	1300	50	35	650	52		
GFD(S)D560-90	single /three	220/ 380	0. 18 0. 11	1300	50	40	700	52	100～315	4
GFD(S)D660-90	single /three	220/ 380	0. 23 0. 13	1300	50	50	800	54	100～630	4
GFD(S)D730-90	single /three	220/ 380	0. 23 0. 13	1300	50	50	850	54	400～800	4
GFD(S)D760-90	single /three	220/ 380	0. 27 0. 16	1300	50	60	900	54	630～1000	4
GFD(S)D860-90	single /three	220/ 380	0. 27 0. 16	1300	50	60	1000	54	50～100	2
GFD(S)D920-90	single /three	220/ 380	0. 36 0. 21	1300	50	80	1100	54	50～120	2
GFD(S)D1050-90	single /three	220/ 380	0. 36 0. 21	1300	50	80	1150	54	100～200	2
GFD(S)D1200-90	single /three	220/ 380	0. 36 0. 21	1300	50	80	1300	54	100～200	2
GFD(S)D365-120	single /three	220/ 380	0. 16 0. 09	1300	50	35	600	52	315～500	6

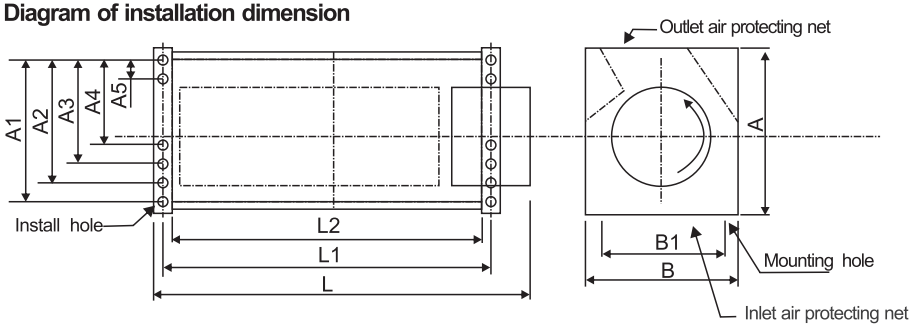
Model	Motor parameter						Air delivery ≧M/H	Noise ≤db	Transformer capacity matched KVA	Number for each set
	phase nos	voltage V	current ≤A	Rotary speed R/MIN	Frequency Hz	power W				
GFD(S)D385-120	single /three	220/ 380	0.16 0.09	1300	50	35	650	52	400～800	6
GFD(S)D440-120	single /three	220/ 380	0.18 0.11	1300	50	40	750	54	400～1000	6
GFD(S)D470-120	single /three	220/ 380	0.18 0.11	1300	50	40	800	54	800～1200	6
GFD(S)D490-120	single /three	220/ 380	0.18 0.11	1300	50	40	850	54	1000～1600	6
GFD(S)D520-120	single /three	220/ 380	0.23 0.13	1300	50	50	900	56	1250～2000	6
GFD(S)D590-120	single /three	220/ 380	0.27 0.16	1300	50	60	950	56	1500～2500	6
GFD(S)D610-120	single /three	220/ 380	0.27 0.16	1300	50	60	1000	56	1600～3000	4
GFD(S)D1000-120	single /three	220/ 380	0.36 0.21	1300	50	80	1300	56	1250～2000	2
GFD(S)D1100-120	single /three	220/ 380	0.36 0.21	1300	50	80	1400	56	1250～2000	2
GFD(S)D1200-120	single /three	220/ 380	0.36 0.21	1300	50	80	1500	56	600～1000	2
GFD(S)D1300-120/2	single /three	220/ 380	0.27 0.16	1300	50	60	2100	56	600～1000	2
GFD(S)D365-150	single /three	220/ 380	0.32 0.18	1300	50	70	1050	58	630～1250	6
GFD(S)D470-150	single /three	220/ 380	0.36 0.21	1300	50	80	1250	58	800～1600	6
GFD(S)D490-150	single /three	220/ 380	0.36 0.21	1300	50	80	1300	58	1600～2000	6
GFD(S)D590-150	single /three	220/ 380	0.41 0.24	1300	50	90	1500	58	2000～2500	6

5. Outline and installation dimensions of top-blowing type fan

Model	B	B1	A	A1	A2	A3	A4	A5	L	L1	Mounting hole
GFD(S)D365-90	130	100	150	110		80			365	325	4-Φ7×10
GFD(S)D385-90	130	100	150	110		80			385	345	4-Φ7×10
GFD(S)D440-90	130	100	150	110		80			440	400	4-Φ7×10
GFD(S)D470-90	130	100	150	110		80			470	430	4-Φ7×10
GFD(S)D560-90	130	100	150	110		80			560	520	4-Φ7×10
GFD(S)D660-90	130	100	150	110		80			660	620	4-Φ7×10
GFD(S)D760-90	130	100	150	110		80			760	720	4-Φ7×10
GFD(S)D860-90	130	100	150	110		80			860	820	4-Φ7×10
GFD(S)D920-90	130	100	150	110		80			920	880	4-Φ7×10
GFD(S)D1050-90	130	100	150	110		80			1050	1010	4-Φ7×10
GFD(S)D1200-90	130	100	150	110		80			1200	1160	4-Φ7×10
GFD(S)D365-120	150	120	155	120	100	80			365	325	4-Φ7×10
GFD(S)D385-120	150	120	155	120	100	80			385	345	4-Φ7×10
GFD(S)D440-120	150	120	155	120	100	80			440	400	4-Φ7×10
GFD(S)D470-120	150	120	155	120	100	80			470	430	4-Φ7×10
GFD(S)D490-120	150	120	155	120	100	80			490	450	4-Φ7×10
GFD(S)D520-120	150	120	155	120	100	80			520	480	4-Φ7×10
GFD(S)D590-120	150	120	155	120	100	80			590	550	4-Φ7×10
GFD(S)D1000-120	150	120	155	120	100	80			1000	960	4-Φ7×10
GFD(S)D1100-120	150	120	155	120	100	80			1100	1060	4-Φ7×10
GFD(S)D1200-120	150	120	155	120	100	80			1200	1160	4-Φ7×10
GFD(S)D1300-120/2	150	120	155	120	100	80			1300	1230	4-Φ7×10

Model	B	B1	A	A1	A2	A3	A4	A5	L	L1	Mounting hole
GFD(S)D365-150	185	155	195	165	140	120	100	20	365	325	4-Φ7×10
GFD(S)D470-150	185	155	195	165	140	120	100	20	470	430	4-Φ7×10
GFD(S)D490-150	185	155	195	165	140	120	100	20	490	450	4-Φ7×10
GFD(S)D590-150	185	155	195	165	140	120	100	20	590	550	4-Φ7×10

Diagram of installation dimension

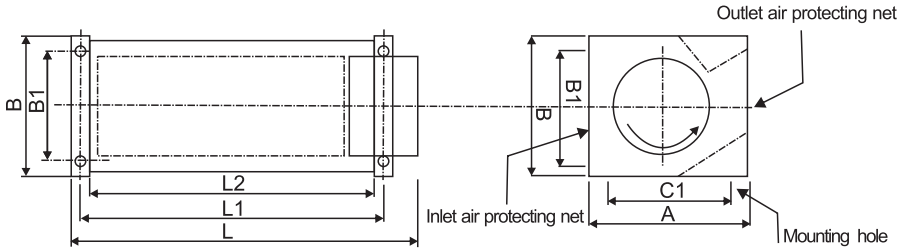


6. Outline and imstallation dimensions of side-blowing type fan

Model	A	C1	B	B1	L	L1	L2	Mounting hole
GFD(S)D365-90	150	110	130	100	365	325	305	4-Φ7×10
GFD(S)D385-90	150	110	130	100	385	345	325	4-Φ7×10
GFD(S)D440-90	150	110	130	100	440	400	380	4-Φ7×10
GFD(S)D470-90	150	110	130	100	470	430	410	4-Φ7×10
GFD(S)D560-90	150	110	130	100	560	520	500	4-Φ7×10
GFD(S)D660-90	150	110	130	100	660	620	600	4-Φ7×10
GFD(S)D760-90	150	110	130	100	760	720	700	4-Φ7×10
GFD(S)D860-90	150	110	130	100	860	820	800	4-Φ7×10
GFD(S)D920-90	150	110	130	100	920	880	860	4-Φ7×10
GFD(S)D1050-90	150	110	130	100	1050	1010	990	4-Φ7×10
GFD(S)D1200-90	150	110	130	100	1200	1160	1140	4-Φ7×10

Model	A	C1	B	B1	L	L1	L2	Mounting hole
GFD(S)D365-120	155	120	150	120	365	325	305	4-Φ7×10
GFD(S)D385-120	155	120	150	120	385	345	325	4-Φ7×10
GFD(S)D440-120	155	120	150	120	440	400	380	4-Φ7×10
GFD(S)D470-120	155	120	150	120	470	430	410	4-Φ7×10
GFD(S)D490-120	155	120	150	120	490	450	430	4-Φ7×10
GFD(S)D520-120	155	120	150	120	520	480	460	4-Φ7×10
GFD(S)D590-120	155	120	150	120	590	550	530	4-Φ7×10
GFD(S)D1000-120	155	120	150	120	1000	960	940	4-Φ7×10
GFD(S)D1100-120	155	120	150	120	1100	1060	1040	4-Φ7×10
GFD(S)D1200-120	155	120	150	120	1200	1160	1140	4-Φ7×10
GFD(S)D1300-120/2	155	120	150	120	1300	1260	1240	4-Φ7×10
GFD(S)D365-150	195	165	185	155	365	325	305	4-Φ7×10
GFD(S)D470-150	195	165	185	155	470	430	410	4-Φ7×10
GFD(S)D490-150	195	165	185	155	490	450	430	4-Φ7×10
GFD(S)D590-150	195	165	185	155	590	550	530	4-Φ7×10

Diagram of installation dimension



7. Operating conditions

1.Normal operating conditions

a.Indoor use; b.Ambient temperature:-5～ +40℃； C.Air relative humidity should not

exceed 95% (at25℃)； d.Altitude should not exceed 1000m

2.The industrial gas passes through the cooling fan should not contain strong acid,strong alkali or other corosive solutions.

3.Protect from impurities like sand or dust dropping in the fan, otherwise,the fan may be burnt, or fan blade may be broken.

8. Installation and maintenance

1. Before installation, please check whether the fan is damaged or deformed due to packing or transportation, if any damage or defornation, the fan should not be installed or used until it is repaired.

2.Check whether the parts and screws are loosened,whether there is touching or displacement between the blade and air duct; if yes, they should be well regulated prior to installation.

3.After installation, please carry out trial run to the cooling fan, wait until it runs normally, then it can be online used.

4. If the fan has been left unused for a long time, please carry out trial run to it before reusing, only when it is able to run normally that it can be online used.

5.After installation, please seal the junction box, preventing from burnt of motor caused by short-circuit due to leakage of junction box.

9. Conveying and storage

1.During conveying, please handle with care. Carry and place it according to the mark and requirements on the package, keep top side up, don't set in the vertica position.

2.During conveying,the fan should be protected from severe impact or serious shock, othervise, the packing case and product may be damaged.

3.The fan should be stored in ventilated and dry place where has no corrosive gas, and should be protected from the rain or insolation.

10. Notification for order

1.When placing an order, please refer to the product model specified as the document, and select suitable model according to the using requirements,transformer capqcity and

structure type. Besides, custom-made products also are available at request.

2.We can deliver the products according to the order form or order contract within 3-7 days, and can deliver the customized products within 15 days.

11. Quality guarantee period

The products are guaranteed for two years since the date of leaving the factory.The company would be responsible for maintaining or changing the defective products for free within this.