TRW-I、II（HTFC-I、II）型前倾柜式离心风机
TRW-I, II (HTFC-I, II) Forward- Inclined Cabinet Centrifugal Fans

一、产品概述 Product Overview

1、TRW(HTFC)型前倾柜式离心风机是一种高效率、低噪声箱式离心风机。产品由低噪声前倾多翼离心风机、电机、轴承、传动件、消声型箱体等组成。根据安装位置的不同，提供 12 种不同角度的进出风口位置，以满足用户不同的安装需要。根据消防与通风的不同要求分 A 式和 B 式两种类型，A 式电机装在箱体外，用于消防排烟，根据 CCCF 细则规定，命名为“离心式消防排烟风机”，并经国家消防合格评定 280℃高温条件下连续运行 30 分钟，B 式电机装在箱体内，用于通风换气。

1. TRW (HTFC) forward -inclined cabinet centrifugal fan is a high-efficiency, low-noise box-type centrifugal fan. The product consists of a low-noise forward-inclined multi-blade centrifugal fan, motor, bearing, transmission parts, silencer box, etc. According to the different installation positions, 12 different angles of air inlet and outlet positions are provided to meet the different installation needs of users. According to the different requirements of fire protection and ventilation, it is divided into two types: A and B. The A-type motor is installed outside the box and is used for fire smoke exhaust. According to the CCCF regulations, it is named “centrifugal fire smoke exhaust fan” and has been evaluated by the national fire protection qualification to run continuously for 30 minutes under high temperature conditions of 280℃. The B-type motor is installed in the box and is used for ventilation.

2、TRW(HTFC)型前倾柜式离心风机经不断的改进和开发，现可分为 I、II 两种类型，其中 I 型为单速型，II 型为双速型，配用双速电机，实现两档调速，可满足用户对不同工况点性能调节的需要。风机也可配用变频电机和变频控制器，实现变频调速，建议调节频率锁定范围在 25Hz~50Hz。

2. After continuous improvement and development, TRW (HTFC) forward-inclined cabinet centrifugal fans can now be divided into two types: I and II. Type I is a single-speed type, and type II is a dual-speed type. It is equipped with a dual-speed motor to achieve two-speed speed regulation, which can meet the user’s needs for performance adjustment at different working conditions. The fan can also be equipped with a variable frequency motor and a variable frequency controller to achieve variable frequency speed regulation. It is recommended to adjust the frequency lock range to 25Hz~50Hz.

3、为适应防爆环境需要，风机可做成防爆风机，防爆等级为 EXd II BT4 Gb，适用于易燃、易爆气体的场所。

3. To meet the needs of explosion-proof environment, the fan can be made into an explosion-proof fan with an explosion-proof grade of Exd II BT4 Gb, which is suitable for places with

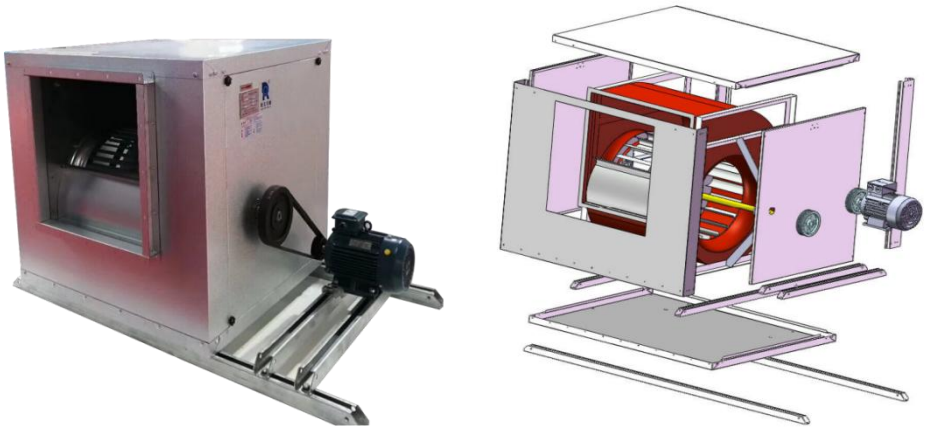
flammable and explosive gases.

4、风机可加配初效、中效或高效过滤器，以提高空气的清洁度，配置过滤器时应考虑实际压力损耗并需适当增加箱体长度。

4. The fan can be equipped with primary, medium or high efficiency filters to improve the cleanliness of the air. When configuring the filter, the actual pressure loss should be considered and the box length should be appropriately increased.

二、产品图片 Product Image

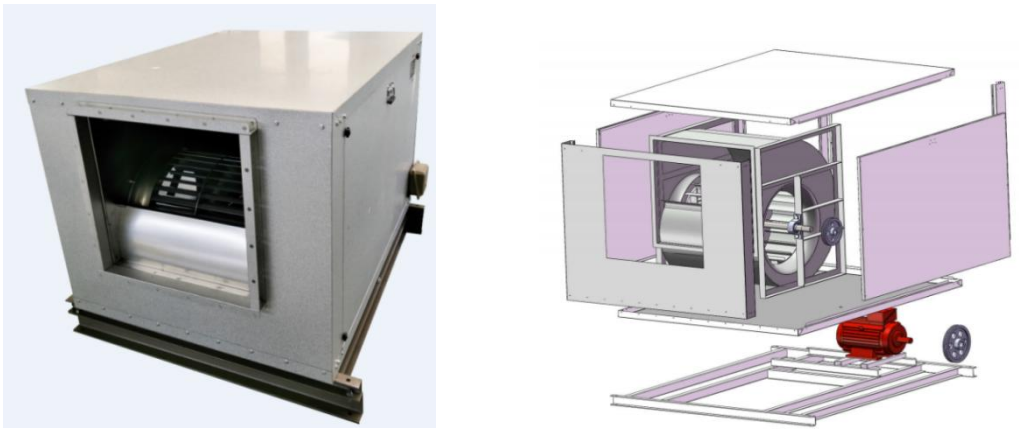
实物图 Physical picture　　爆炸图 explosion diagram



TRW 型前倾柜式离心风机—A 式（TRW-225~760）

TRW forward-inclined cabinet centrifugal fan - Type A (TRW-225~760)

实物图 Physical picture　　爆炸图 explosion diagram



TRW 型前倾柜式风机—B 式(TRW-225~560)

TRW forward-inclined cabinet fan – Type B (TRW-225~560)

三、现场实物图 On-site photos



四、工作温度 Product working conditions

工作温度 Operating temperature	耐高温 High temperature resistance	湿度 humidity	介质条件 Medium conditions	工作电源 Working power supply
-20~+40℃ (可连续运转 continuous operation possible)	100℃ (可连续 20 小时 20 hours continuous) 280℃ (可连续 30 分钟 continuous for 30 minutes)	＜90%	空气 Air	三相 Three-phase 380V/50Hz

五、产品应用 Applications

风机可广泛应用于宾馆、饭店、礼堂、影视院、地下室、厂矿企业、办公楼等场所通风排烟，特别适用于需要低噪声、大风量通风排烟场所。

The fan can be widely used in ventilation and smoke exhaust in hotels, restaurants, auditoriums, cinemas, basements, factories, mines, office buildings and other places. It is especially suitable for places that require low noise and large air volume ventilation and smoke exhaust.

六、产品配置 Product Configuration

a. 标准配置 Standard configuration

- 叶轮 impeller
- 机芯（机壳、集流器、支架）Movement (housing , collector, bracket)
- 电机 Motor
- 皮带轮、皮带 Pulleys, belts
- 轴承 Bearings

- 消声箱体 Silence box
- 主轴 Spindle
- 皮带罩（仅 A 式）Belt cover (A style only)
- 电机调节导轨 Motor adjustment rail
- 进出风口法兰 Inlet and outlet flange

b. 备选件及附件（订货时注明是否购买）Optional parts and accessories (please indicate whether to purchase when ordering)

※ 减振设备 Vibration reduction equipment

※ 控制箱 Control box

※ 消声器 Muffler

※ 对接法兰 Butt flange

※ 过滤器 Filter ※ 电机防雨罩（仅 A 式）Motor rain cover (Type A only)

七、产品加工工艺
7. Product Processing Technology

（1）风机叶轮、蜗壳为优质镀锌板，全部模具化生产，采用铆接、咬接等工艺，表面清洁平整、不存在焊接变形现象，叶轮经静、动平衡校正，其平衡精度不大于 5.6 级。

The fan impeller and volute are made of high-quality galvanized plates, all of which are produced by molds, using riveting, biting and other processes . The surface is clean and flat, and there is no welding deformation. The impeller is calibrated for static and dynamic balance, and its balance accuracy is no more than level 5.6 .

（2）立柱箱体风机消声型箱体采用框架、箱板拼装设计，框架采用先进的金属冷弯机组一次拉伸成型的框架（可根据用户需要采用铝合金型材框架），箱板采用优质的镀铝锌板，表面清洁美观、耐腐蚀性强，夹层填充采用消音棉，进一步降低噪声，产品可进行现场拆装。

column box fan silencer type box adopts a frame and box panel assembly design. The frame is stretched and formed by an advanced metal cold-bending machine (aluminum alloy profile frame can be used according to user needs). The box panel is made of high-quality galvanized steel with a clean and beautiful surface and strong corrosion resistance. The interlayer is filled with sound-absorbing cotton to further reduce noise. The product can be disassembled and assembled on site.

（3）无立柱箱体风机消声型箱体采用优质的镀铝锌板折弯成型、组装设计，箱板采用先进的弯板中心（RSA）折弯成型，整体箱体外观清洁美观、耐腐蚀性强，产品可进行现场拆装。

column -free box fan silencer box is made of high-quality galvanized aluminum plate bending and assembly design. The box plate is bent and formed by advanced bending center (RSA). The overall box appearance is clean and beautiful, and the corrosion resistance is strong. The product can be disassembled and assembled on site.

（4）前倾柜式离心式风机代号表示 forward-inclined cabinet centrifugal fan code representation

TRW(HTFC)-I.II-No

T 表示前倾式(叶轮是多翼式叶轮）indicates forward-inclined type (the impeller is a multi-blade impeller)

RW 表示“荣文”代号 represents the code name of " Rongwen "

HTFC 表示消防通风（两用）低噪声柜式离心风机 indicates fire ventilation (dual-purpose) low-noise cabinet centrifugal fan

I 表示单速前倾式 indicates single speed forward tilt

II 表示双速前倾式 indicates dual-speed forward tilting

八、TRW（HTFC）前倾柜式离心风机性能参数表
8.TRW (HTFC) forward-inclined cabinet centrifugal fan performance parameter table

TRW（HTFC）-I 前倾柜式离心风机性能参数表 TRW (HTFC) -I forward-inclined cabinet centrifugal fan performance parameter table:

机号 Machine number	对应规格 specifications	转速 Speed (r/min)	风量 Air volume (m3 / h)	全压 Total pressure (pa)	静压 Static pressure (pa)	电机型号 motor model	电机功率 Motor power (kw)	重量 Weight (kg)	噪声 Noise dB (A)
9	TRW-I-225 HTFC-I-9	900	1650	333	312	YE2-80M1-4	0.55	84	53
			2040	345	314				54
			2280	358	319				55
			2520	354	306				56
			2870	342	280				57
			3412	299	211				58
		1100	2050	380	348	YE2-80M2-4	0.75	85	55
			2450	392	347				56
			2850	397	336				57
			3250	420	340				58
			3650	411	311				59
			4013	340	219				60
		1300	2400	382	339	YE2-90S-4	1.1	89	56
			2840	396	335				57
			3280	485	404				58
			3720	480	376				59
			4160	468	338				60
			4531	443	288				61
		1400	2826	496	436	YE2-90L-4	1.5	92	57
			3225	510	432				58
			3532	535	441				59
			4006	526	405				60
			4480	518	367				61
			4954	505	320				62
		1500	3465	616	526	YE2-100L1-4	2.2	97	58
			3834	635	524				59
			4152	656	526				60
			4682	685	520				61
			5128	658	460				62
			5648	645	405				63

机号 Machine number	对应规格 specifications	转速 Speed (r/min)	风量 Air volume (m3 / h)	全压 Total pressure (pa)	静压 Static pressure (pa)	电机型号 motor model	电机功率 Motor power (kw)	重量 Weight (kg)	噪声 Noise dB (A)
10	TRW-I-250 HTFC-I-10	1100	2950	375	337	YE2-80M2-4	0.75	105	54
			3352	381	331				55
			3750	392	330				56
			4150	398	322				57
			4238	376	297				58
			4389	315	230				59
		1250	3348	510	461	YE2-90S-4	1.1	110	55
			3750	526	464				56
			4150	535	459				57
			4532	527	436				58
			4826	501	398				59
			5236	479	358				60
			3348	510	461	YE2-90L-4	1.5	115	54
			3750	526	464				55
			4150	535	459				56
			4532	527	436				57
			4826	501	398				58
			5236	479	358				59
		1450	3572	535	479	YE2-100L1-4	2.2	121	58
			3963	556	487				59
			4375	577	492				60
			4884	610	505				61
			5415	587	458				62
			5748	541	395				63
		1500	3250	597	550	YE2-100L2-4	3	131	59
			3937	639	571				60
			4549	708	617				61
			5250	694	572				62
			5861	471	519				63
			6498	612	426				64
12	TRW-I-315 HTFC-I-**12**	1000	3689	371	341	YE2-90S-4	1.1	129	55
			4367	382	340				56
			5123	399	341				57
			5450	376	310				58
			5780	354	280				59
			6389	314	223				60

机号 Machine number	对应规格 specifications	转速 Speed (r/min)	风量 Air volume (m3 / h)	全压 Total pressure (pa)	静压 Static pressure (pa)	电机型号 motor model	电机功率 Motor power (kw)	重量 Weight (kg)	噪声 Noise dB (A)
12	TRW-I-315 HTFC-I-**12**	1100	3920	379	345	YE2-90L-4	1.5	132	56
			4382	385	342				57
			5640	413	342				58
			5995	382	302				59
			6358	368	278				60
			7040	341	231				61
		1250	5440	413	347	YE2-100L1-4	2.2	140	57
			5795	423	348				58
			6158	479	395				59
			6840	468	364				60
			7150	447	333				61
			7756	425	291				62
		1350	6103	558	475	YE2-100L2-4	3	143	59
			6546	592	497				60
			7158	625	511				61
			7610	599	470				62
			7971	579	438				63
			8250	557	406				64
15	TRW-I-400	900	5751	415	381	YE2-100L1-4	2.2	186	55
			5959	431	394				56
			6401	452	410				57
			7583	474	415				58
			8797	462	382				59
			10175	442	335				61
		1000	7216	542	488	YE2-100L2-4	3	191	57
			8425	578	505				58
			9775	562	463				59
			10332	498	388				60
			11850	476	331				61
			12650	455	290				62
		1100	7685	554	493	YE2-112M-4	4	195	58
			8310	605	534				59
			9481	621	528				60
			10299	654	544				61
			11557	586	448				62
			13798	522	326				64

机号 Machine number	对应规格 specifications	转速 Speed (r/min)	风量 Air volume (m3 / h)	全压 Total pressure (pa)	静压 Static pressure (pa)	电机型号 motor model	电机功率 Motor power (kw)	重量 Weight (kg)	噪声 Noise dB (A)
15	TRW-I-400	1200	8454	628	554	YE2-132S-4	5.5	222	60
			9719	651	553				61
			11201	667	537				62
			12889	684	512				63
			13241	672	491				64
			15628	615	362				66
		1300	9015	742	658	YE2-132M-4	7.5	243	62
			10304	792	682				63
			11601	847	708				64
			12932	885	712				65
			14218	827	618				66
			17013	727	427				68
18	TRW-I-450 HTFC-I-18	800	8479	377	338	YE2-100L2-4	3	219	56
			9561	392	342				57
			10631	405	343				58
			11868	422	346				59
			12540	398	313				60
			14108	361	253				62
		850	9421	464	416	YE2-112M-4	4	225	57
			9824	489	436				58
			10715	514	451				59
			12090	523	443				60
			12839	493	403				61
			15283	457	330				63
		950	10349	658	600	YE2-132S-4	5.5	252	58
			11702	662	587				59
			13039	673	580				60
			14585	682	566				61
			15426	671	541				62
			17486	618	452				64
		1000	12494	803	718	YE2-132M-4	7.5	264	59
			13212	812	717				60
			14214	832	722				61
			15248	841	714				62
			16192	824	681				63
			19092	745	547				65

机号 Machine number	对应规格 specifications	转速 Speed (r/min)	风量 Air volume (m3 / h)	全压 Total pressure (pa)	静压 Static pressure (pa)	电机型号 motor model	电机功率 Motor power (kw)	重量 Weight (kg)	噪声 Noise dB (A)
18	TRW-I-450 HTFC-I-18	1100	15448	925	795	YE2-160M-4	11	301	61
			16104	935	794				62
			17742	948	777				63
			18634	959	770				64
			19664	933	723				65
			21064	847	605				67
20	TRW-I-500 HTFC-I-20	650	12117	311	258	YE2-112M-4	4	295	60
			13076	367	306				61
			14233	408	335				62
			14988	431	351				63
			15841	416	327				64
			16938	380	277				66
		700	14049	380	309	YE2-132S-4	5.5	322	61
			15082	446	365				62
			16328	493	398				63
			17141	520	415				64
			18060	503	386				65
			19241	461	329				67
		800	15914	520	430	YE2-132M-4	7.5	334	62
			17093	606	502				63
			18518	668	546				64
			19446	703	568				65
			20497	680	530				66
			23646	635	435				68
		900	18778	595	469	YE2-160M-4	11	380	63
			20105	704	559				64
			21707	782	613				65
			22752	796	611				66
			23934	775	570				67
			25452	728	497				69
		1000	20642	925	773	YE2-160L-4	15	408	65
			22116	936	761				66
			24897	965	744				67
			26058	885	642				68
			24371	1060	848				69
			28558	985	694				72

机号 Machine number	对应规格 specifications	转速 Speed (r/min)	风量 Air volume (m3 / h)	全压 Total pressure (pa)	静压 Static pressure (pa)	电机型号 motor model	电机功率 Motor power (kw)	重量 Weight (kg)	噪声 Noise dB (A)
20	TRW-I-500 HTFC-I-20	1000	20642	925	773	YE2-180M-4	18.5	435	65
			22116	936	761				66
			24897	965	744				67
		1000	26058	885	642				68
			24371	1060	848				69
			28558	985	694				72
22	TRW-I-560 HTFC-I-22	550	17911	387	298	YE2-112M-4	4	322	59
			16153	413	341				60
			14070	448	393				61
			12756	483	438				62
			11750	451	413				63
			17485	389	374				65
		600	15383	423	358	YE2-132S-4	5.5	372	62
			16529	455	380				63
			18026	470	380				64
			19611	488	382				65
			20747	468	349				66
			22400	428	290				68
		650	17181	582	501	YE2-132M-4	7.5	384	63
			18481	609	515				64
			20179	629	517				65
			21977	652	519				66
			23265	646	497				67
			26845	592	393				69
		750	20978	659	537	YE2-160M-4	11	430	64
			24433	699	535				65
			26332	724	533				66
			27342	754	547				67
			28283	721	500				68
			30392	658	403				70
		850	21111	739	616	YE2-160L-4	15	445	65
			22822	784	640				66
			25182	812	637				67
			27524	845	636				68
			29000	808	576				69
			32078	725	441				71

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22	TRW-I-560 HTFC-I-22	900	23457	912	760	YE2-180M-4	18.5	476	67
			25358	968	791				68
			27980	1002	786				69
			30582	1043	785				70
			32222	998	711				71
			35642	937	521				73
25	TRW-I-630 HTFC-I-25	550	19673	446	383	YE2-132M-4	7.5	444	64
			22415	466	384				65
			23986	484	390				66
			24960	504	402				67
			26825	472	355				68
			29429	417	275				70
		600	23095	614	527	YE2-160M-4	11	490	65
			26314	642	529				66
			28157	667	538				67
			29301	694	554				68
			31490	650	489				69
			34547	574	380				71
		700	25661	758	651	YE2-160L-4	15	505	66
			29237	792	653				67
			31286	824	664				68
			32557	857	684				69
			34989	803	603				70
			38386	709	469				72
		750	26801	827	710	YE2-180M-4	18.5	540	68
			30537	864	712				69
			32676	899	725				70
			34004	935	746				71
			36544	876	658				72
			40092	773	511				74
		800	28512	936	803	YE2-180L-4	22	570	75
			32486	978	806				74
			34762	1017	820				73
			36174	1058	845				72
			38877	991	745				71
			42651	875	578				69
		800	45185	1039	707	YE2-200L-4	30	610	70
			41062	1219	944				71
			37236	1283	1057				72
			34888	1377	1179				73
			32381	1272	1101				74
			28681	1083	949				76

机号 Machine number	对应规格 specifications	转速 Speed (r/min)	风量 Air volume (m3 / h)	全压 Total pressure (pa)	静压 Static pressure (pa)	电机型号 motor model	电机功率 Motor power (kw)	重量 Weight (kg)	噪声 Noise dB (A)
28	TRW-I-710 HTFC-I-28	500	28187	529	439	YE2-160M-4	11	580	66
			29583	549	450				67
			31381	563	452				68
			33679	593	465				69
			35402	566	424				70
			38409	548	381				72
		550	32820	649	527	YE2-160L-4	15	615	66
			34445	677	543				67
			36539	709	558				68
			39215	749	575				69
			41222	699	507				70
			44723	675	449				72
		600	34751	727	591	YE2-180M-4	18.5	640	67
			36472	759	609				68
			38688	795	625				69
			41522	840	645				70
			43646	784	569				71
			47354	757	503				73
		650	35137	844	704	YE2-180L-4	22	670	68
			36877	876	722				69
			40118	861	679				70
			43983	882	663				71
			45131	862	632				72
			49880	842	561				74
		700	38612	898	729	YE2-200L-4	30	701	70
			40524	937	751				71
			42987	981	772				72
			46135	1037	796				73
			48496	968	702				74
			52615	934	621				76
30	TRW-I-760 HTFC-I-30	450	27664	376	317	YE2-160L-6	11	640	66
			29869	385	316				67
			31961	402	323				68
			34156	418	328				69
			36357	396	294				70
			42629	380	259				72

机号 Machine number	对应规格 specifications	转速 Speed (r/min)	风量 Air volume (m3 / h)	全压 Total pressure (pa)	静压 Static pressure (pa)	电机型号 motor model	电机功率 Motor power (kw)	重量 Weight (kg)	噪声 Noise dB (A)
30	TRW-I-760 HTFC-I-30	500	30787	466	393	YE2-160L-4	15	675	67
			33241	477	391				68
			35570	498	400				69
			38012	517	406				70
			40462	490	364				71
			47442	470	297				73
		550	33464	551	464	YE2-180M-4	18.5	701	67
			36132	563	462				68
			38663	588	472				69
			41318	611	479				70
			43981	579	430				71
			51567	556	350				73
		600	36588	658	555	YE2-180L-4	22	730	68
			39504	673	553				69
			42271	703	565				70
			45174	731	573				71
			48086	693	514				72
			56380	664	419				74
		650	41049	829	699	YE2-200L-4	30	772	70
			44322	847	696				71
			47426	884	711				72
			50683	920	721				73
			53950	872	647				74
			63256	836	527				76
		700	44619	979	825	YE2-225S-4	37	806	72
			48176	1001	822				78
			51550	1045	840				77
			55090	1087	852				76
			58641	1030	765				75
			68756	988	623				73
33	HTFC-I-33	400	27840	424	378	YE2-160L-6	11	690	69
			31765	431	371				70
			35462	433	358				71
			39314	435	343				72
			43032	431	321				73
			45804	428	304				74

机号 Machine number	对应规格 specifications	转速 Speed (r/min)	风量 Air volume (m3 / h)	全压 Total pressure (pa)	静压 Static pressure (pa)	电机型号 motor model	电机功率 Motor power (kw)	重量 Weight (kg)	噪声 Noise dB (A)
33	HTFC-I-33	450	32018	405	344	YE2-180L-6	15	750	70
			36331	417	339				71
			40014	430	335				72
			43621	447	335				73
			48358	422	283				74
			53817	406	234				75
		500	37436	554	471	YE2-180M-4	18.5	780	70
			42479	570	463				71
			46786	588	458				72
			51003	612	457				73
			56542	577	387				74
			62925	555	320				75
		550	39899	629	535	YE2-180L-4	22	810	72
			45274	648	526				73
			49864	668	520				74
			54358	695	520				75
			60262	655	440				76
			67065	631	364				77
		600	43347	743	631	YE2-200L-4	30	850	73
			49187	764	621				74
			54173	788	614				75
			59056	820	613				76
			65469	774	519				77
			72860	744	429				78
		630	45189	799	678	YE2-225S-4	37	938	74
			51422	832	675				75
			56635	868	678				76
			61740	896	670				77
			68445	846	568				78
			76172	813	469				79
		650	49258	959	815	YE2-225M-4	45	987	75
			55894	987	802				76
			61560	1015	790				77
			67109	1059	792				78
			74397	999	671				79
			82796	961	555				80

机号 Machine number	对应规格 specifications	转速 Speed (r/min)	风量 Air volume (m3 / h)	全压 Total pressure (pa)	静压 Static pressure (pa)	电机型号 motor model	电机功率 Motor power (kw)	重量 Weight (kg)	噪声 Noise dB (A)
36	HTFC-I-36	350	35812	358	309	YE2-160M- 6	11	740	71
			40637	368	305				72
			44756	379	303				73
			48790	395	305				74
			54089	373	261				75
			60195	359	221				76
		400	44126	543	469	YE2-200L1-6	18.5	800	71
			50070	559	464				72
			55146	575	459				73
			60117	600	462				74
			66645	566	397				75
			74169	545	335				76
		450	47323	625	540	YE2-20L2-6	22	830	72
			53699	643	533				73
			59142	661	528				74
			64473	690	532				75
			71475	651	456				76
			79544	626	385				77
		500	50521	712	615	YE2-200L-4	30	985	73
			57327	733	608				74
			63138	754	602				75
			68829	787	606				76
			76304	742	520				77
			84918	714	439				78
		550	53718	805	695	YE2-225S-4	37	1050	74
			60955	829	687				75
			67134	852	681				76
			73186	889	685				77
			81134	839	588				78
			90293	807	496				79
		580	56916	904	781	YE2-225M-4	45	1170	75
			64583	930	772				76
			71130	957	764				77
			77542	998	769				78
			85963	942	660				79
			95668	906	557				80

机号 Machine number	对应规格 specifications	转速 Speed (r/min)	风量 Air volume (m3 / h)	全压 Total pressure (pa)	静压 Static pressure (pa)	电机型号 motor model	电机功率 Motor power (kw)	重量 Weight (kg)	噪声 Noise dB (A)
40	HTFC-I-40	400	47982	485	424	YE2-200L2-6	22	978	71
			52195	499	427				72
			59227	513	421				73
			65231	551	438				74
			71111	535	401				75
			78833	520	355				76
		420	53465	602	526	YE2-225M-6	30	1005	72
			58161	619	530				73
			65996	637	522				74
			72686	684	544				75
			79238	664	498				76
			87843	645	441				77
		450	58263	715	625	YE2-225S-4	37	1050	73
			63380	736	629				74
			71919	757	620				75
			79209	812	646				76
			86349	789	592				77
			95726	766	524				78
		500	61691	801	700	YE2-225M-4	45	1168	74
			67108	825	705				75
			76149	849	695				76
			83868	910	724				77
			91428	885	663				78
			10357 0	859	587				79

九、TRW（HTFC）-II 柜式离心风机性能参数表
9. TRW (HTFC) -II cabinet centrifugal fan performance parameter table

机号 Machine number	对应 规格 specifications	转速 Speed (r/min)	风量 Air volume (m3 / h)	全压 Total pressure (pa)	静压 Static pressure (pa)	电机 型号 motor model	电机功率 Motor power(kw)	重量 Weight(kg)	噪声 Noise dB (A)
10	TRW-II-250 HTFC-II-10	1300	3572	535	479	YDT3-100L1-4/6	2.2/0.7	121	57
			3963	556	487				58
			4375	577	492				59
			4884	610	505				60
			5415	587	458				61
			5748	541	395				62
		866	2380	237	212				58
			2640	247	216				59
			2914	256	219				60
			3253	271	224				61
			3607	260	203				62
			3829	240	175				63
		1400	3250	597	550	YDT3-112M-4/6	3.2/1.1	131	59
			3937	639	571				60
			4549	708	617				61
			5250	694	572				62
			5861	671	519				63
			6498	612	426				64
		933	2166	265	244				58
			2624	284	253				59
			3032	314	274				60
			3499	308	254				61
			3906	298	231				62
			4330	272	189				63
12	TRW-II-315 HTFC-II-12	1100	5440	413	347	YDT3-100L1-4/6	2.2/0.7	131	57
			5795	423	348				58
			6158	479	395				59
			6840	468	364				60
			7150	447	333				61
			7756	425	291				62
		733	3625	183	154				56
			3862	188	155				57
			4103	213	175				58
			4558	208	162				59
			4765	198	148				60
			5168	189	129				61

机号 Machine number	对应 规格 specifications	转速 Speed (r/min)	风量 Air volume (m3 / h)	全压 Total pressure (pa)	静压 Static pressure (pa)	电机 型号 motor model	电机功率 Motor power(kw)	重量 Weight(kg)	噪声 Noise dB (A)
12	TRW-II-315 HTFC-II-12	1200	6103	558	475	YDT3-112M-4/6	3.2/1.1	143	56
			6546	592	497				57
			7158	625	511				58
			7610	599	470				59
			7971	579	438				60
			8250	557	406				61
		800	4069	248	211				57
			4364	263	211				58
			4772	278	227				59
			5073	266	209				60
			5314	257	195				61
			5500	248	180				62
15	TRW-II-400 HTFC-II-15	975	7685	554	493	YDT3-132S-4/6	4.7/1.5	195	59
			8310	605	534				60
			9481	621	528				61
			10299	654	544				62
			11557	586	448				63
			13798	522	326				64
		650	5123	246	219				60
			5540	269	237				61
			6321	276	235				62
			7704	260	199				63
			8106	241	173				64
			9199	232	145				65
		1050	8454	628	554	YDT3-132M-4/6	6.7/2.2	222	58
			9719	651	553				59
			11201	667	537				60
			12889	684	512				61
			13241	672	491				62
			15628	615	362				63
		700	5636	279	246				57
			6480	289	246				58
			7467	296	239				59
			8827	299	218				60
			9921	284	182				61
			10418	273	161				62
		1150	9015	742	658	YDT3-160M-4/6	9.5/3.1	243	62
			10304	792	682				63
			11601	847	708				64
			12932	885	712				65
			14218	827	618				66
			17013	727	427				68

机号 Machine number	对应 规格 specifications	转速 Speed (r/min)	风量 Air volume (m3 / h)	全压 Total pressure (pa)	静压 Static pressure (pa)	电机 型号 motor model	电机功率 Motor power(kw)	重量 Weight(kg)	噪声 Noise dB (A)
15	TRW-II-400 HTFC-II-15	800	6271	359	319	YDT3-160M-4/6	9.5/3.1	243	61
			7168	383	330				62
			8070	410	342				63
			9891	400	299				64
			10793	377	256				65
			11835	352	207				66
18	TRW-II-450 HTFC-II-1	850	10349	658	600	YDT3-132M-4/6	6.7/2.2	252	58
			11702	662	587				59
			13039	673	580				60
			14585	682	566				61
			15426	671	541				62
			17486	618	452				63
		550	6697	275	251				59
			7572	277	246				60
			8437	282	243				61
			9981	281	227				62
			10713	278	216				63
			11314	259	189				64
		900	12494	803	718	YDT3-160M-4/6	9.5/3.1	264	58
			13212	812	717				59
			14214	832	722				60
			15248	841	714				61
			16192	824	681				62
			19092	745	547				63
		600	8329	357	319				57
			8808	361	319				58
			9476	370	321				59
			10795	366	303				60
			11774	348	272				61
			12728	331	243				62
		1050	15903	980	843	YDT3-160L-4/6	12/4	283	61
			16578	991	841				62
			18264	1005	823				63
			19183	1017	816				64
			20243	989	766				65
			21684	897	641				66
		700	10602	436	375				60
			11052	440	374				61
			12176	446	366				62
			13495	439	340				63
			13759	427	324				64
			14456	399	285				65

机号 Machine number	对应 规格 specifications	转速 Speed (r/min)	风量 Air volume (m3 / h)	全压 Total pressure (pa)	静压 Static pressure (pa)	电机 型号 motor model	电机功率 Motor power(kw)	重量 Weight(kg)	噪声 Noise dB (A)
18	TRW-II-450 HTFC-II-18	1200	17131	1138	978	YDT3-180M-4/6	15.5/5.1	301	61
			17858	1150	976				62
			19674	1166	955				63
			20664	1180	947				64
			21806	1147	889				65
			23358	1041	744				66
		800	11420	506	435				60
			11905	511	434				61
			13116	518	424				62
			14537	510	395				63
			14822	495	376				64
			15572	463	331				65
20	TRW-II-500 HTFC-II-20	800	15914	520	430	YDT3-160M-4/6	8/6.5	334	62
			17093	606	502				63
			18518	668	546				64
			19446	703	568				65
			20497	680	530				66
			23646	635	435				67
		550	10941	246	203				61
			11752	286	237				62
			12731	316	258				63
			14092	321	250				64
			14577	313	237				65
			16257	300	206				66
		900	18778	595	469	YDT3-160L-4/6	11/9	380	63
			20105	704	559				64
			22752	796	611				65
			23934	775	570				66
			24729	763	545				67
			25452	728	497				68
		600	12519	265	209				62
			13403	313	249				63
			14472	347	273				64
			15956	344	253				65
			16486	339	242				66
			16968	324	221				67
		1000	20642	925	773	YDT3-180M-4/6	14/11	380	65
			22116	936	761				66
			24897	965	744				67
			26058	885	642				68
			24371	1060	848				69
			28558	985	694				70

机号 Machine number	对应 规格 specifications	转速 Speed (r/min)	风量 Air volume (m3 / h)	全压 Total pressure (pa)	静压 Static pressure (pa)	电机 型号 motor model	电机功率 Motor power(kw)	重量 Weight(kg)	噪声 Noise dB (A)
20	TRW-II-500 HTFC-II-20	670	13830	415	347	YDT3-180M-4/6	14/11	380	64
			14818	420	342				65
			16681	433	334				66
			16329	476	381				67
			18260	458	339				68
			19134	442	331				69
22	TRW-II-560 HTFC-II-22	720	13138	650	600	YDT3-160M-4/6	8/6.5	400	62
			14771	650	590				63
			16600	647	570				64
			17923	630	536				65
			21597	576	448				66
			23490	550	410				67
		470	8700	285	263				61
			9780	285	264				62
			10990	284	258				63
			11866	276	234				64
			14298	252	196				65
			15550	241	180				66
		750	20978	659	537	YDT3-160L-4/6	11/9	430	64
			24433	699	535				65
			26332	724	533				66
			27342	754	547				67
			28283	721	500				68
			30392	558	303				69
		520	14545	317	258				63
			16940	336	257				64
			18257	348	256				65
			19610	347	241				66
			20220	325	213				67
			21072	268	146				68
		850	21111	739	616	YDT3-180M-4/6	14/11	445	65
			22822	784	640				66
			25182	812	637				67
			27524	845	636				68
			29000	808	576				69
			32078	625	341				70
		570	14157	332	277				64
			15304	353	288				65
			16887	365	286				66
			19447	364	259				67
			20509	341	225				68
			21511	281	154				69

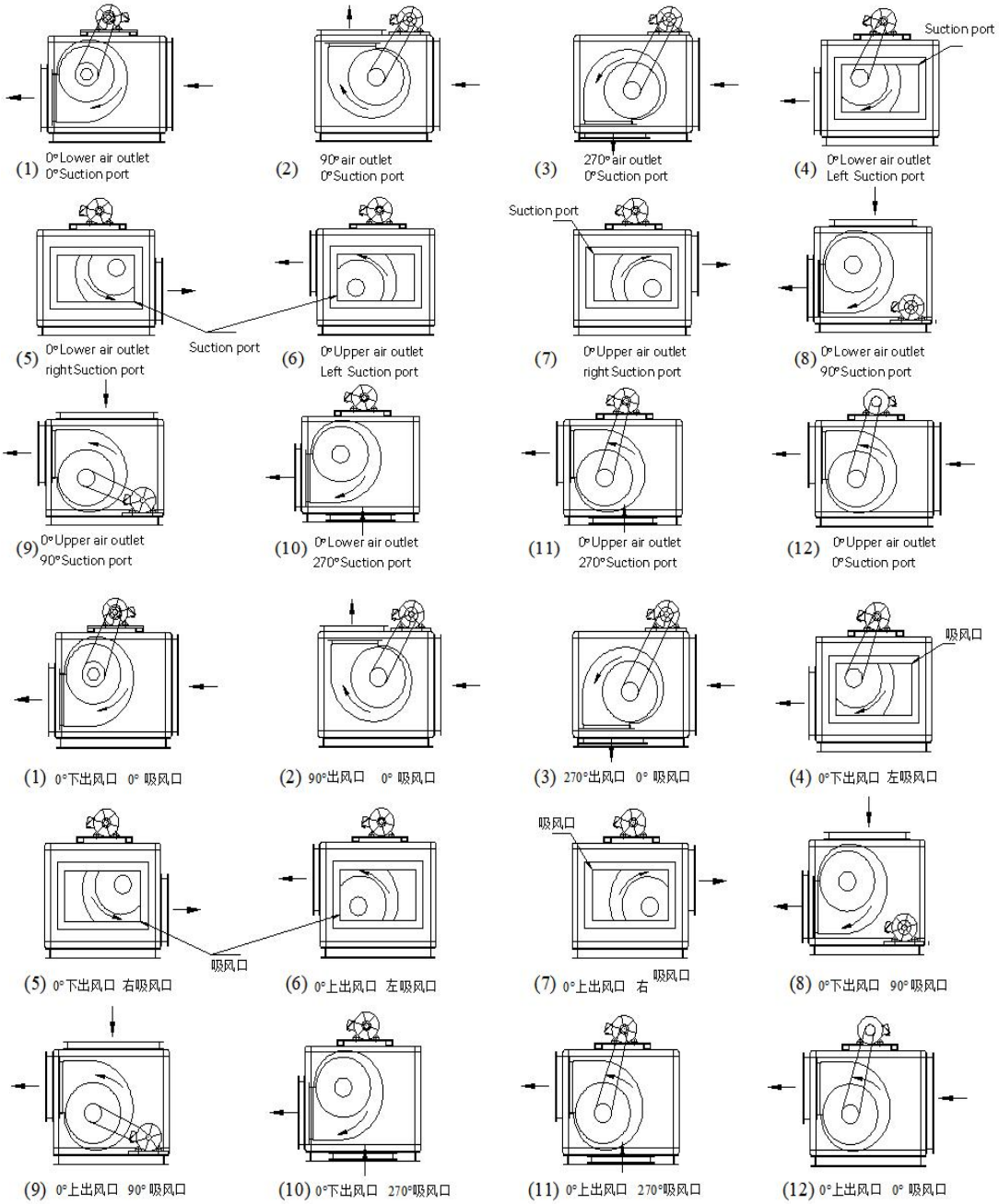
机号 Machine number	对应 规格 specifications	转速 Speed (r/min)	风量 Air volume (m3 / h)	全压 Total pressure (pa)	静压 Static pressure (pa)	电机 型号 motor model	电机功率 Motor power(kw)	重量 Weight(kg)	噪声 Noise dB (A)
25	TRW-II-630 HTFC-II-25	650	23095	614	527	YDT3-160L-4/6	11/9	490	65
			26314	642	529				66
			28157	667	538				67
			29301	694	554				68
			31490	650	489				69
			34547	574	380				70
		450	15989	294	253				64
			18217	308	253				65
			19493	320	258				66
			21801	312	234				67
			22523	294	211				68
			23917	275	182				69
		730	25661	758	651	YDT3-180L-4/6	16/13	505	66
			29237	792	653				67
			31286	824	664				68
			32557	857	684				69
			34989	803	603				70
			38386	709	469				71
		485	17049	335	287				65
			19425	350	288				66
			20786	364	293				67
			23246	354	266				68
			24016	334	240				69
			25503	313	207				70
		810	28512	936	803	YDT3-200L2-4/6	24/8.5	570	75
			32486	978	806				74
			34762	1017	820				73
			36174	1058	845				72
			38877	991	745				71
			42651	875	578				70
		550	19360	432	370				74
			22058	451	372				73
			23604	469	378				72
			26398	457	343				71
			27273	431	309				70
			28961	403	267				69
28	TRW-II-710 HTFC-II-28	600	32820	649	527	YDT3-180L-4/6	16/13	615	66
			34445	677	543				67
			36539	709	558				68
			39215	749	575				69
			41222	699	507				70
			44723	675	449				71

机号 Machine number	对应 规格 specifications	转速 Speed (r/min)	风量 Air volume (m3 / h)	全压 Total pressure (pa)	静压 Static pressure (pa)	电机 型号 motor model	电机功率 Motor power(kw)	重量 Weight(kg)	噪声 Noise dB (A)
28	TRW-II-710 HTFC-II-28	400	21880	288	234	YDT3-180L-4/6	16/13	615	65
			22964	301	241				66
			24359	315	248				67
			27481	311	225				68
			28827	293	199				69
			29815	300	199				70
		660	35137	744	604	YDT3-200L2-4/6	24/8.5	670	68
			36877	776	622				69
			39118	812	639				70
			41983	859	660				71
			44131	802	581				72
			47880	773	514				73
		450	23957	346	281				67
			25143	361	289				68
			26671	378	297				69
			30090	373	270				70
			31563	351	238				71
			32645	360	239				72
		730	38612	898	729	YDT3-225S-4/6	28/22	701	70
			40524	937	751				71
			42987	981	772				72
			46135	1037	796				73
			48496	968	702				74
			52615	934	621				75
		550	29091	510	414				69
			30532	532	427				70
			32387	557	438				71
			36538	549	399				72
			38327	518	352				73
			39641	530	353				74
30	TRW-II-760 HTFC-II-30	547	33464	551	464	YDT3-180L-4/6	16/13	73	67
			36132	563	462				68
			38663	588	472				69
			41318	611	479				70
			43981	579	430				71
			47987	556	379				72
		359	23168	264	223				66
			25014	270	222				67
			26766	282	226				68
			30448	278	206				69
			33222	267	181				70
			35700	266	168				71

机号 Machine number	对应 规格 specifications	转速 Speed (r/min)	风量 Air volume (m3 / h)	全压 Total pressure (pa)	静压 Static pressure (pa)	电机 型号 motor model	电机功率 Motor power(kw)	重量 Weight(kg)	噪声 Noise dB (A)
30	TRW-II-760 HTFC-II-30	600	36588	658	555	YDT3-200L2-4/6	24/8.5	730	68
			39504	673	553				69
			42271	703	565				70
			45174	731	573				71
			48086	693	514				72
			56380	664	419				73
		400	24392	293	247				67
			26336	299	246				6
			28181	312	251				69
			32057	308	228				70
			34977	296	201				71
			37587	295	186				72
		670	41049	829	699	YDT3-225S-4/6	28/22	772	70
			44322	847	696				71
			47426	884	711				72
			50683	920	721				73
			53950	872	647				74
			63256	836	527				75
		450	27571	374	315				69
			29768	382	314				70
			31853	399	321				71
			36235	393	292				72
			39536	378	257				73
			42485	377	238				74

十、TRW(HTFC)前倾柜式离心风机风口位置图

10.TRW (HTFC) forward-inclined cabinet centrifugal fan air outlet position diagram

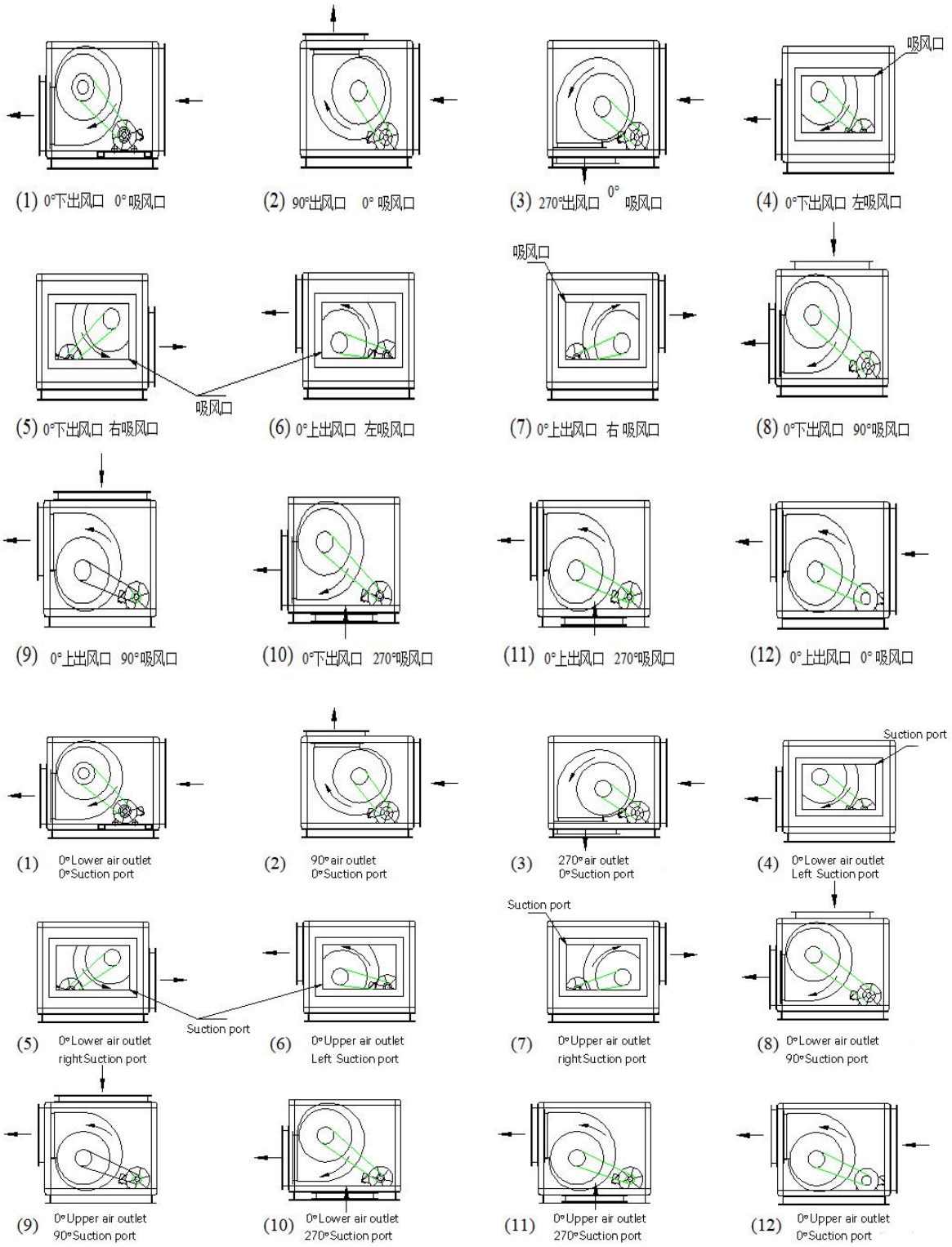


TRW(HTFC)型前倾柜式离心风机-A 式

TRW (HTFC) forward-inclined cabinet centrifugal fan - Type A

注：电机机座号≤180 可顶置，电机机座号＞180 放底下，如仍需放箱体顶，请订货注明。

Note: Motors with a frame size of ≤180 can be placed on top, and motors with a frame size of ＞180 can be placed at the bottom. If it still needs to be placed on the top of the box, please indicate this when placing an order.



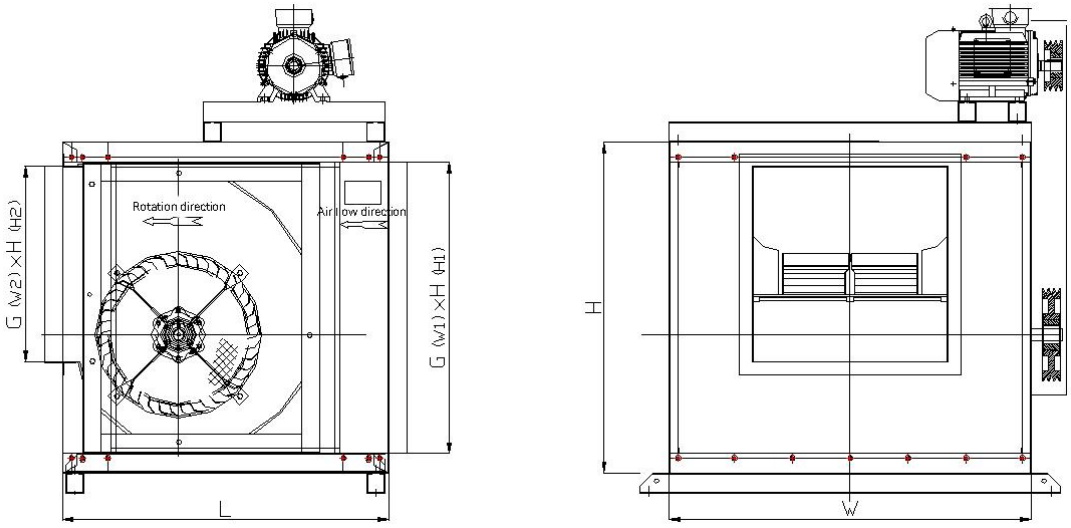
TRW(HTFC)型前倾柜式离心风机-B 式

TRW (HTFC) forward-inclined cabinet centrifugal fan - Type B

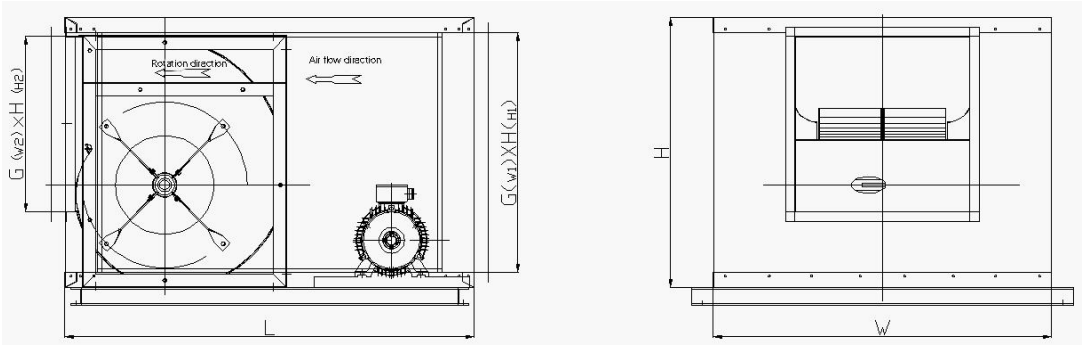
注： 本公司根据用户不同需求，可制作 12 种风口位置以外的形式

Note: Our company can produce forms other than the 12 types of air outlet positions according to different user needs

十一、TRW(HTFC)前倾柜式离心风机外形图
11. TRW (HTFC) forward-inclined cabinet centrifugal fan appearance



TRW-A 式（外置）TRW-A type (external)



TRW-B 式 TRW-B

注： 本公司根据用户不同需求，可制作 12 种风口位置以外的形式。机组进出风方向，以顺气流方向为标准，特殊情况，另见说明或详细图纸，A 式风机箱，检修门开一侧，轴伸端面板可以做成压板式，以便于安装，B 式风机箱，检修门开两侧。

Note: Our company can produce forms other than the 12 air outlet positions according to different user needs. The air inlet and outlet direction of the unit is based on the airflow direction. For special cases, please refer to the instructions or detailed drawings. For the A-type fan box, the inspection door is opened on one side, and the shaft extension end panel can be made into a pressure plate type for easy installation. For the B-type fan box, the inspection door is opened on both sides.

十二、TRW(HTFC)前倾柜式离心风机外形尺寸表
12. Dimensions of TRW (HTFC) forward-inclined cabinet centrifugal fans

TRW-A.B 型无立柱前倾柜式离心风机外形尺寸表
TRW-AB type column-free forward-inclined cabinet centrifugal fan dimensions

箱体型号 Box Model	机芯型号 Movement Model	L				W	H	出风口 outlet		进风口 Inlet		底座 Base
		A 型 Type A	A 型 90° 出风 A-type 90° air outlet	B 型 Type B	B 型 90° 出风 Type B 90° air outlet			G W2 (宽 width)	H H2 (高 high)	G W1 (宽 width)	H H1 (高 high)	
TRW-225	TRW-225	600	600	800	830	640	495	280	280	560	435	4#C
TRW-250	TRW-250	650	650	850	890	700	540	320	320	620	480	4#C
TRW-315	TRW-315	700	700	960	1010	760	610	380	380	680	550	4#C
TRW-400	TRW-400	800	800	1150	1220	880	795	460	460	800	685	5.5#C
TRW-450	TRW-450	900	900	1300	1390	1000	915	540	540	920	805	5.5#C
TRW-500	TRW-500	1000	1000	1450	1560	1120	932	600	600	1040	822	5.5#C
TRW-560	TRW-560	1100	1100	1500	1610	1240	987	640	640	1160	877	5.5#C
TRW-630	TRW-630	1200	1200	/	/	1380	1112	730	730	1300	1002	8#
TRW-710	TRW-710	1340	1340	/	/	1520	1298	800	800	1440	1188	8#
TRW-760	TRW-760	1340	1340	/	/	1630	/	880	880	1550	1230	8#

注： 1、A 式电机下置的，具体外形视用户实际要求而定。

2、制作槽钢底座时，按机芯尺寸制作。

Note: 1. The motor of type A is placed at the bottom, and the specific appearance depends on the actual requirements of the user.

2. When making the channel steel base, make it according to the size of the movement.

HTFC-A.B 型立柱前倾柜式离心风机外形尺寸表
HTFC-AB type column forward tilting cabinet centrifugal fan overall dimensions

箱体型号 Box Model	机芯型号 Movement Model	L (长 length)				W (宽 Width)	H (高 high)	Air outlet		Inlet		底座 Base
		A 型 Type A	A 型 90°出风 A-type 90° air outlet	B 型 Type B	B 型 90° 出风 B type 90° air outlet			G W2 (宽 width)	H H2 (高 high)	G W1 (宽 width)	H H1 (高 high)	
HTFC-9	TRW-225	640	670	800	830	640	525	280	280	560	445	5#
HTFC-10	TRW-250	700	740	850	890	700	570	320	320	620	490	5#
HTFC-12	TRW-315	750	800	960	1010	760	640	380	380	680	560	5#
HTFC-15	TRW-400	850	920	1150	1220	880	775	460	460	800	695	6.3#
HTFC-18	TRW-450	950	1040	1300	1390	1000	895	540	540	920	815	6.3#
HTFC-20	TRW-500	1050	1160	1450	1560	1120	970	600	600	1040	890	6.3#
HTFC-22	TRW-560	1150	1260	1500	1610	1240	1020	640	640	1160	940	6.3#
HTFC-25	TRW-630	1250	1380	1700	1830	1380	1150	760	760	1300	1070	8#
HTFC-28	TRW-710	1400	1560	1900	2060	1520	1340	830	830	1440	1260	8#
HTFC-30	TRW-760	1450	1630	1950	2130	1630	1380	910	910	1530	1280	8#
HTFC-33	TRW-800	1600	1780	2050	2230	1700	1470	970	970	1600	1370	8#
HTFC-36	TRW-900	1700	1900	2250	2450	1950	1575	1080	1035	1850	1475	10#
HTFC-40	TRW-1000	1900	2150	2450	2700	2100	1795	1180	1200	2000	1695	10#

注： 1、A 式电机下置的，具体外形视用户实际要求而定。

2、本公司机号 HTFC≥25#箱体出风口面板设置加强筋，箱体出风口内径较机芯内径大 30mm，注意制作槽钢底座时，按机芯尺寸制作。HTFC≥30#采用 5#立柱。

Note: 1. The motor of type A is placed at the bottom, and the specific appearance depends on the actual requirements of the user.

2. For our machine HTFC ≥25#, the air outlet panel of the box is equipped with reinforcing ribs. The inner diameter of the air outlet of the box is 30mm larger than the inner diameter of the movement. Please note that when making the channel steel base, it should be made according to the size of the movement. HTFC≥30# uses 5# columns.

严禁缺相运行，供电线路必须为专用线路，不应长期用临时线路供电。

2. The fan can only be operated when it is completely normal. At the same time, the power supply facilities must have sufficient capacity and stable voltage. It is strictly prohibited to operate in a phase-missing state. The power supply line must be a dedicated line and temporary lines should not be used for power supply for a long time.

3、风机在运行过程中发现风机有异常声、电机严重发热、外壳带电、开关跳、不能起动等现象，应立即停机检查。为了保证安全，不允许在风机运行中进行维修。检修后应进行试运转五分钟左右，确认无异常现象再开机运转。

3. If the fan makes abnormal sounds, the motor is overheated, the housing is electrified, the switch jumps, or it cannot start, the fan should be stopped for inspection immediately. To ensure safety, maintenance is not allowed during the operation of the fan. After maintenance, the fan should be tested for about five minutes to confirm that there are no abnormalities before restarting.

4、根据使用环境条件不定期对轴承补充或更换润滑油脂(电机封闭轴承在使用寿命期内不必更换润滑油脂)，为保证风机在运行过程中良好的润滑，加油次数不少于 1000 小时次，封闭轴承和电机轴承加油用 ZL-3 锂基润滑油脂填充轴承内外圈的 2/3。严禁缺油运转。

4. Replenish or replace the lubricating grease of the bearings from time to time according to the use environment conditions (the motor closed bearings do not need to be replaced with lubricating grease during the service life). To ensure good lubrication of the fan during operation, the oiling frequency should be no less than 1000 hours. The ZL-3 lithium-based lubricating grease should be used to fill 2/3 of the inner and outer rings of the closed bearings and motor bearings. It is strictly forbidden to operate without oil.

5、风机应贮存在干燥的环境中，避免电机受潮。风机在露天存放时，应有防雨措施。在贮存与搬运过程中应防止风机磕碰，以免风机受到损伤。

5. The fan should be stored in a dry environment to prevent the motor from getting wet. When the fan is stored in the open, rain protection measures should be taken. The fan should be prevented from being bumped during storage and transportation to avoid damage to the fan.

（七）风机故障及排除 Fan failure and troubleshooting

风机的调试及使用过程中可能会发生一些故障，常见故障分为机械故障和电器故障。排除方法见表一和表二。

Some faults may occur during the commissioning and use of the fan. Common faults are divided into mechanical faults and electrical faults. See Table 1 and Table 2 for troubleshooting methods.

表一 风机常见机械故障及排除

Table 1 Common mechanical failures of fans and their solutions

NO.	Fault	Possible Causes
1	Bearing temperature rise is too high	①The bearing bracket vibrates violently, ② The lubricating grease is of poor quality, has deteriorated, contains dust, sand, dirt and other debris, the tightening force of the bearing seat connecting bolts is too large or too small, and the bearing runs without oil, ③ The shaft and bearing are installed crookedly, and the front and rear bearings are not concentric, ④ The bearing is damaged or the bearing life has expired, ⑤ The fan shaft and motor shaft are unbalanced, and the belt groove is misaligned.
2	Fan vibration	① The impeller is unbalanced, ② The impeller screws are loose or the wheel disc and blades are deformed, ③ The foundation is not rigid enough or is not firm, ④ The connecting bolts between the casing and the bracket, and the bearing and the bracket are loose, ⑤ The center of gravity is shifted due to improper position of the shock absorber.
3	Impeller rubbing	① The impeller is unbalanced or deformed, ② The casing or air inlet rubs against the impeller, ③ The impeller fasteners are loose due to the reversal of the impeller, ④ The impeller shaft hole and shaft are loose, ⑤ The fan inlet and outlet ducts are poorly installed.

表二 风机常见电气故障及排除

Table 2 Common electrical faults of fans and their solutions

NO.	Fault		Possible Causes
1	Cannot start, switch tripped	(1) (2) (3) (4) (6) (7) (9) (10) (11) (14)	(1) The impeller rotates in the opposite direction, (2) The switch capacity is small, or the setting value of the thermal protector is too small and unreasonable, (3) The starting current is too large. For high-power fans, it is recommended to start with reduced voltage, (4) The fan load is too large (especially for centrifugal fans). The regulating valve at the duct inlet or outlet can be adjusted to the minimum, (5) The incoming line contact is poor or the same phase causes phase loss, the control box accessories have poor performance, or the line contact to the fan causes phase loss, (6) The power grid capacity is insufficient and the voltage is low, (7) The line is leaking, (8) The wiring is unreliable, and the wiring is broken due to heat at the wiring after running for a period of time, (9) The motor wiring is wrong, and the Y connection is connected to the connection method (generally, the motor below 3KW including 3KW is Y connection, and the motor above 3KW is connection method), (10) The high and low speed wiring of the dual-speed fan motor is connected incorrectly, and the box is not designed and produced according to the A/YY (or Y/YY) principle, resulting in control principle errors, (11) The high and low speed numbers on the dual-speed fan control box are inconsistent with the actual speed, (12) The gate or throttle valve in the air intake pipe is not closed tightly during operation, or there is air leakage in the air duct, (for centrifugal fans and sub-boxes) (13) The density of the gas transported by the fan is too high, (14) The fan speed is too high.
2	Can start, but makes abnormal sound, and the switch trips after running for a while	(5) (8) (9) (10) (11)	
3	Overcurrent, motor temperature rise is too high	(1) (4) (9) (10) (11) (13) (14)	