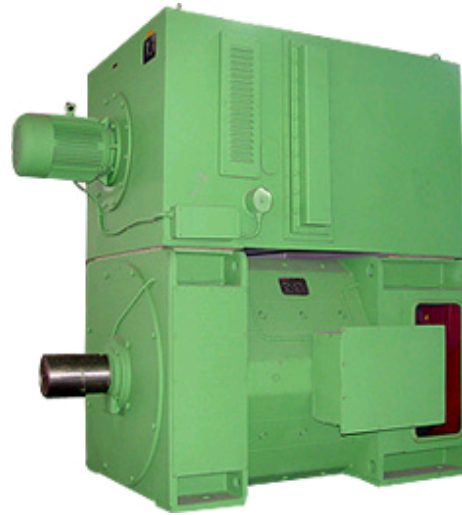


D SERIES

DC MOTOR

General description



The D series medium size DC motors are new products of the works developed with latest technology of design and manufacturing. There are eight shaft heights for motor frames ranging from 315-710mm.

The performance, outline dimenaions and technical specifications of the motors conform to the standard of our country(GB)and Inter-national Electric Committee(IEC), while the mechanic dimensions tolerance of the motors conform to the standard of International Stadard Organization(ISO).

Working conditions

1.It is allowed to install this seris motors in the environment with worse working conditions. However proper cooling and protection type should be chosen to keep the cleanness of the motors.

2.The cooling air should not contain acid or alkli material, which is harmful to the insulation and commutating performance of the motors.

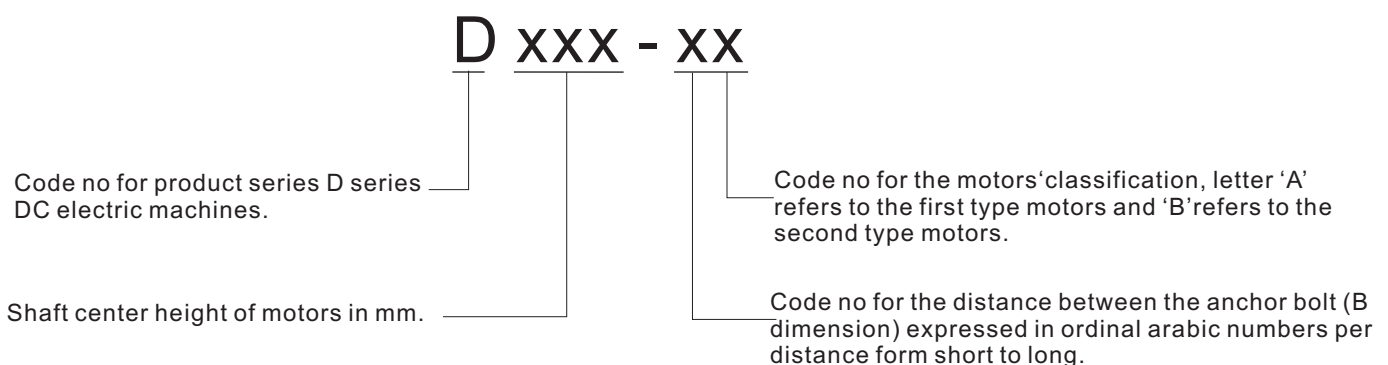
3.In case the motors will be applied to marines, tropical and humid areas, or the areas with salt and humid air, please notify before signing contracts.

4.The motors can reach its tated power under the working condition of less than 1000M sea level height and 40°C E ambient temperature.

5.The power source for the motors can be provided by static rectified source or DC generator.

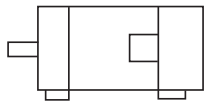
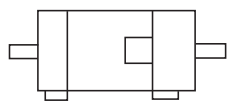
6.In case the motor is powered by static rectified source, the number of pluse wave should not be less than 6,the peak ripple wave factor not be over 10% under the rated speed, voltage and load current.

Type description(D315-630)



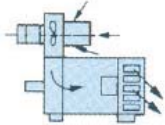
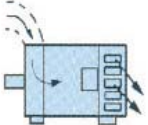
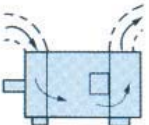
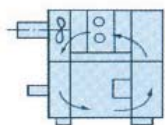
As the frame is of angular thin steel laminations structure, the motor is small in volume, light in weight and can be powered by silicon controlled rectified source. Meanwhile it has good commutating performance in case sudden change of load current occurs. Insulation treatment of VPI applied on the integral stator and rotor makes the windings good in antihumidity performance, mechanical strength and insulation thermal conductivity. The armature core made up with silicon steel laminations has good magnetic conductivity. Rolling bearings with operating oiling construction are adopted. The motor insulation is class F.

The mounting of the motors conform to Symbols for Types of Construction and Mounting Arrangements of Rotating Electrical Machinery specified in GB 997 and IEC 34-7.

<p>Standard IM 1001</p> 	<p>bracket bearing, foot mounting with one cylindric shaft extension.</p>
<p>Standard IM 1002</p> 	<p>bracket bearing, foot mounting with two cylindric shaft extension.</p>

IP 23 and IP 44 is adopted for the motors protection of this series, which conform to the standard of Classification of Degrees of Protection Provided by Enclosures for Rotating Machines specified in GB4942 - 1 and IEC34 - 5. IC06, IC17, IC37 and ICW 37A 86 is adopted for the cooling of this series motors, which conform to the standard of Methods of Cooling Rotating Machinery specified in GB1993 and IEC34 - 6. Other types of protection and cooling required by customers can be negotiated. The standard cooling air outlet locates on the side of driving end, (non commutator end).

Following list shows the protection and cooling types of this series motors:

Cooling type	IC06 Cooling type	IC06 Duct ventilation at one end	□IC06 Duct ventilation at both end	ICW37A86 With top mounted cooler(water to air)
Diagram				
Protection grade	Preventing any solid foreign matter with more than 12mm dia. and drip within an angle of 60 degrees with right angle from dropping into the motors		Preventing any solid foreign matter with more than 1mm dia. and drip of any directions from dropping into the motors	

Products performance

1. Continuous working system (S1) is applied.
2. The standard rated voltage of this series motors are 220V, 330V, 440V, 550V, 660V and 750V. The voltage beyond above scope can be negotiated when placing orders.
3. Separate excitation is the basic excitation type of this series motors. Four terminals of the excitation winding are divided into two groups. In case the two groups are in series or parallel connection, the excitation voltage is 220V or 110V respectively. Excitation voltage beyond the scope can be negotiated.
Forced excitation is allowed with the voltage of less than 500V. During forced excitation, the transient excitation current can exceed the rated excitation, current slightly until the excitation current gets stabilized.
4. Short time overload capability:
The DC motors (class A) can sustain the short time (1min) overload specified in the following list:

Percent of the basic speed	Percent of the rated current	
	occasionally used	often used
100	200(180*)	175(160)
200	160	150
>300	140	120

The DC motors (class B) can sustain the short time (1 min) overload specified in the following list:

Percent of the basic speed	Percent of the rated current	
	occasionally used	often used
100	200(180*)	175(160)
200	200(180*)	160
>300	175(160*)	140

The data in brackets are applied in case the basic speed of the motors is equal to or greater than the speed specified in the following:

shaft height(mm)	315	355	400	450	500	560
basic speed(r/min)	1000	1000	900	800	710	630

The occasionally used short time overload capability refers to the motors' capability of sustaining continuous overload within 1 minute in emergent or unusual cases. The transient switching device of breaker is suggested to be rectified according to such capability.

The often used short time overload capability as a part of normal operating period refers to the motors' capability of sustaining overload repeatedly.

After short time overload operation, light load operation is necessary to restrict the load root-mean-square of the whole load period within its continuous rating.

The DC motors (Class B) can sustain following continuous load:

- (1) Under the rated armature voltage and rated speed the motor can be continuously operated with 115% overload. In this case, temperature rise will be relatively higher, and the other performance may be different from those under specified ratings.
- (2) Soon after continuous operation under rated armature voltage and rated speed, the motor can be operated with 125% overload for two hours. In this case, temperature rise will not exceed the specified value, while the other performance may be different from those under specified ratings.

Under lower overload, longer time overload is allowed. For the motors (Class B), the occasionally used overload times is 2.5 times (under the rated speed) within 15 sec. (please consult with the manufacturer in detail).

5. Speed adjustment

No speed adjustment is specified for this series motors. Any special requirement in this field by customers can be discussed.

6. Current variation:

The allowable current variation () of this series motors under all speeds and loads is 200 times of the rated current per second.

7. noise and vibration:

The noise level of this series motors conform to the specifications stipulated in 'Noise measuring Method for Electric Machines of GB

2806 and Standard of Noise level for Electric Machines of IEC34-9.

Vibration of this series motors conform to the specifications stipulated in vibration Measuring Method for Electric Machines of GB2807 and vibration Measuring Method and Limit for Electric Machines' of IEC34-14.

Capacity choosing:

Class A: DC motors

Please refer to the technical data list, Customers can choose motor type and specifications according to the required capacity, rotating speed, voltage and etc.

Class B: DC motors

Except the rated output of the motors, which is lower than of class A motors with same shaft height and foot axial length, the other technical data are basically.

Technical Data

D315-1A

Applied to the cooling types of IC06, IC17, IC37, ICW 37A86

series no.	Rotating speed under the voltage below rated voltage Un r/min					Output PN kW	Rated current A	Efficiency η %	Max-speed η_{max} r/min	Excitation power Pf kW	Moment of Inertial J $kg \cdot m^2$	Ventilation		Armature circuit	
	220V	330V	440V	550V	660V							volume Q	pressure H	voltage drop ΔU	inductance La
												m^3/s	pa	V	mH
01	436	696	958	1219	1481	61	335	80.0	1300	3.1	4.8	1.0	1000	34.2	0.72
						96	330	86.0	1800	3.1	4.8	1.0	1000	33.8	0.68
						129	324	89.0	1800	3.1	4.8	1.0	1000	33.2	0.68
		161	318	90.6	1800	3.1	4.8	1.0	1000	32.7	0.68				
		190	310	91.6	1800	3.1	4.8	1.0	1000	31.9	0.69				
02	573	901	1229	1556		80	421	84.1	1700	3.1	5.0	0.9	840	25.6	0.44
						123	412	88.5	1800	3.1	5.0	1.0	1010	25.1	0.43
		162	400	90.6		1800	3.1	5.0	1.0	1010	24.4	0.43			
		194	380	91.6		1800	3.1	5.0	1.0	1010	23.3	0.45			
03	760	1185	1610			101	518	86.6	1800	3.1	5.0	1.0	1010	20.5	0.27
						154	510	90.1	1800	3.1	5.0	1.0	1010	20.2	0.26
		205	501			91.6	1800	3.1	5.0	1.0	1010	19.9	0.26		
04	957	1481				123	622	88.2	1800	3.1	5.3	1.0	1010	16.7	0.18
						185	608	90.9	1800	3.1	5.3	1.1	1190	16.4	0.17
05	1204					160	800	89.9	1800	3.1	5.3	1.0	1010	13.7	0.11
06															

Technical Data

D315-2A

Applied to the cooling types of IC06,IC17,IC37,ICW 37A86

series no.	Rotating speed under the voltage below rated voltage UN					Output PN kW	Rated current Ia A	Efficiency η %	Max. speed n_{max} r/min	Excitation power Pf kW	Moment of inertial J kg m ²	Ventilation		Armature circuit	
	r/min											volume Q m ³ /s	pressure H Pa	voltage drop ΔU V	inductance La mH
	220V	330V	440V	550V	660V										
01	344	553	762	972	1182	60	334	78.6	1200	3.1	5.3	1.0	1010	37.5	0.91
						95	329	85.1	1500	3.1	5.3	1.0	1010	36.8	0.86
						129	325	88.3	1800	3.1	5.3	1.0	1010	36.5	0.85
		160	317	90.2	1800	3.1	5.3	1.0	1010	35.6	1.85				
		190	311	91.4	1800	3.1	5.3	1.0	1010	35.0	0.86				
02	453	714	977	1240		78	414	83.1	1500	3.1	5.5	1.0	1010	27.5	0.56
						120	404	87.9	1800	3.1	5.5	1.0	1010	26.9	0.55
						160	395	90.3	1800	3.1	5.5	1.0	1010	26.4	0.54
		195	381	91.5	1800	3.1	5.5	1.0	1010	25.6	0.56				
03	605	945	1287	1629		99	511	85.9	1800	3.1	5.5	1.0	1010	22.1	0.34
						152	504	89.8	1800	3.1	5.5	1.0	1010	21.9	0.33
						200	490	91.5	1800	3.1	5.5	1.0	1010	21.2	0.33
		240	467	92.2	1800	3.1	5.5	1.0	1010	20.3	0.35				
04	762	1183	1606			122	619	87.7	1800	3.1	5.8	1.1	1190	18.1	0.22
						180	592	90.8	1800	3.1	5.8	1.1	1190	17.4	0.23
		225	549	92.0	1800	3.1	5.8	1.1	1190	16.3	0.24				
05	959	1478				160	800	89.7	1800	3.1	5.8	1.0	1010	14.5	0.14
						235	767	91.6	1800	3.1	5.8	1.0	1010	14.1	0.14
06															

Technical Data

D315-3A

Applied to the cooling types of IC06, IC17,IC37,ICW 37A86

series no.	Rotating speed under the voltage below rated voltage UN					Output PN kW	Rated current Ia A	Efficiency η %	Max. speed nmax r/min	Excitation power Pf kW	Moment of inertia kg m ²	Ventilation		Armature circuit	
	r/min											volume JQ m ³ /s	pressure H Pa	voltage drop ΔU V	inductance La mH
	220V	330V	440V	550V	660V										
01	269	436	603	770	938	57	322	76.7	900	4.1	6.5	1.1	1190	40.1	1.2
						91	320	83.9	1500	4.0	6.5	1.1	1190	39.9	1.2
						126	320	87.4	1800	4.0	6.5	1.1	1190	39.9	1.2
						158	315	89.5	1800	4.0	6.5	1.1	1190	39.3	1.2
						189	310	90.9	1800	4.0	6.5	1.1	1190	38.6	1.2
02	357	567	776	987		76	408	81.6	1200	4.1	6.7	1.1	1190	30.0	0.72
						118	400	87.1	1700	4.0	6.7	1.1	1190	29.6	0.69
						159	395	89.7	1800	4.0	6.7	1.1	1190	29.2	0.68
						195	382	91.2	1800	4.0	6.7	1.1	1190	28.3	0.69
03	481	754	1028	1302	1578	97	505	84.8	1500	4.0	6.7	1.1	1190	24.1	0.43
						150	500	89.2	1800	4.0	6.7	1.1	1190	23.9	0.42
						200	490	91.2	1800	4.0	6.7	1.1	1190	23.4	0.42
						240	466	92.2	1800	4.0	6.7	1.1	1190	22.4	0.43
						280	451	92.5	1800	4.0	6.7	1.1	1190	21.8	0.44
04	607	945	1284	1624		119	607	87.0	1800	4.0	7.1	1.1	1190	19.4	0.29
						182	600	90.5	1800	4.0	7.1	1.1	1190	19.1	0.28
						238	580	92.0	1800	4.0	7.1	1.1	1190	18.6	0.28
						283	550	92.3	1800	4.0	7.1	1.1	1190	17.7	0.29
05	761	1175	1592			160	800	89.1	1800	4.0	7.1	1.1	1190	16.0	0.17
						240	780	91.5	1800	4.0	7.1	1.1	1190	15.6	0.17
						305	743	91.8	1800	4.0	7.1	1.1	1190	15.0	0.18
06															

Technical Data

D355-3A

Applied to the cooling types of IC06, IC17,IC37,ICW 37A86

series no.	Rotating speed under the voltage below rated voltage UN r/min					Output PN kW	Rated current Ia A	Efficiency η %	Max. speed n_{max} r/min	Excitation power Pf kW	Moment of inertial J kg m ²	Ventilation		Armature circuit	
	220V	330V	440V	550V	660V							volume Q m ³ /s	pressure H Pa	voltage drop ΔU V	inductance La mH
01	197	327	456	586	716	59	357	71.3	600	4.7	11.2	1.5	1430	52.2	1.5
						96	350	80.2	1000	4.7	11.2	1.5	1430	51.2	1.4
						133	347	84.6	1500	4.7	11.2	1.5	1430	50.9	1.3
		168	342	87.3	1500	4.7	11.2	1.5	1430	50.1	1.3				
		202	337	89.1	1500	4.7	11.2	1.5	1430	49.4	1.3				
02	258	416	574	733	891	78	441	77.1	800	4.6	11.2	1.4	1260	40.3	0.92
						124	435	84.0	1500	4.6	11.2	1.5	1430	39.7	0.87
						167	424	87.5	1500	4.7	11.2	1.5	1430	38.8	0.86
		209	417	89.6	1500	4.6	11.2	1.5	1430	38.2	0.86				
		248	407	90.9	1500	4.6	11.2	1.5	1430	37.3	0.87				
03	365	579	794	1008	1223	105	566	81.6	1200	4.6	11.5	1.5	1430	31.3	0.51
						163	555	87.0	1500	4.6	11.5	1.5	1430	30.7	0.49
						217	540	89.7	1500	4.6	11.5	1.5	1430	29.9	0.49
		267	524	91.3	1500	4.6	11.5	1.6	1610	29.1	0.50				
		312	506	92.2	1500	4.6	11.5	1.6	1610	28.2	0.51				
04	439	690	940	1191	1442	127	666	84.2	1500	4.7	12.2	1.5	1430	25.7	0.36
						194	650	88.7	1500	4.7	12.2	1.5	1430	25.1	0.35
						255	628	90.9	1500	4.7	12.2	1.6	1610	24.4	0.36
		309	603	92.1	1500	4.7	12.2	1.6	1610	23.4	0.37				
		355	573	92.8	1500	4.7	12.2	1.7	1800	22.4	0.38				
05	578	898	1219	1540	166	848	87.0	1500	4.7	12.2	1.5	1430	19.9	0.21	
					246	811	90.5	1500	4.7	12.2	1.6	1610	19.2	0.22	
					315	768	92.0	1500	4.7	12.2	1.7	1800	18.3	0.22	
		371	719	92.8	1540	4.7	12.2	1.8	2000	17.2	0.24				
06															

Technical Data

D355-4A

Applied to the cooling types of IC06, IC17,IC37,ICW 37A86

series no.	Rotating speed under the voltage below rated voltage UN r/min					Output PN kW	Rated current Ia A	Efficiency η %	Max. speed n_{max} r/min	Excitation power Pf kW	Moment of inertial J kg m ²	Ventilation		Armature circuit	
	220V	330V	440V	550V	660V							volume Q m ³ /s	pressure H Pa	voltage drop ΔU V	inductance La mH
01	153	257	360	464	568	57	357	68.6	600	5.2	13.1	1.6	1610	57.9	1.9
						94	349	78.3	800	5.3	13.1	1.6	1610	56.8	1.8
						131	347	83.2	1200	5.3	13.1	1.6	1610	56.4	1.7
		166	341	86.2	1500	5.3	13.1	1.6	1610	55.5	1.7				
		200	336	88.2	1500	5.3	13.1	1.6	1610	54.7	1.7				
02	199	325	450	576	702	76	440	74.6	800	5.4	13.1	1.6	1610	44.6	1.2
						121	429	82.5	1200	5.4	13.1	1.6	1610	43.5	1.13
						165	423	86.3	1500	5.5	13.1	1.6	1610	42.9	1.1
		207	415	88.7	1500	5.4	13.1	1.6	1610	42.2	1.1				
		247	407	90.2	1500	5.4	13.1	1.6	1610	41.4	1.1				
03	286	456	627	797	968	103	564	79.8	1000	5.3	13.4	1.6	1610	34.6	0.65
						161	553	85.9	1500	5.4	13.4	1.6	1610	33.9	0.63
						215	538	88.9	1500	5.3	13.4	1.6	1610	33.1	0.62
		266	524	90.7	1500	5.3	13.4	1.7	1800	32.3	0.63				
		313	509	91.8	1500	5.4	13.4	1.7	1800	31.4	0.64				
04	346	546	746	946	1147	125	664	82.8	1200	5.3	14.1	1.6	1610	28.3	0.46
						192	647	87.8	1500	5.3	14.1	1.6	1610	27.7	0.45
						254	628	90.3	1500	5.3	14.1	1.7	1800	26.9	0.45
		310	605	91.7	1500	5.3	14.1	1.7	1800	26.0	0.46				
		358	578	92.6	1500	5.3	14.1	1.8	2000	24.9	0.48				
05	455	710	965	1220	1475	164	844	86.0	1500	5.4	14.1	1.6	1610	21.9	0.27
						245	811	89.9	1500	5.4	14.1	1.7	1800	21.1	0.27
						316	771	91.7	1500	5.4	14.1	1.7	1800	20.2	0.28
		375	726	92.7	1550	5.4	14.1	1.8	2000	19.1	0.30				
		424	681	93.3	1500	5.4	14.1	1.9	2220	18.1	0.31				
06															

Technical Data

D400-2A

Applied to the cooling types of IC06, IC17,IC37,ICW 37A86

series no.	Rotating speed under the voltage below rated voltage UN r/min					Output PN kW	Rated current Ia A	Efficiency η %	Max. speed n_{max} r/min	Excitation power Pf kW	Moment of inertial J kg m ²	Ventilation		Armature circuit	
	220V	330V	440V	550V	660V							volume Q m ³ /s	pressure H Pa	voltage drop ΔU V	inductance La mH
01	128	219	311	402	493	56	364	65.6	500	5.9	20.8	1.8	1310	63.9	2.3
						96	367	76.1	800	5.8	20.8	1.9	1450	64.4	2.0
						135	364	81.6	1000	5.7	20.8	1.9	1450	64.0	1.9
		173	361	84.9		1200	5.7	20.8	1.9	1450	63.5	1.8			
		211	359	87.1		1500	5.7	20.8	1.9	1450	63.1	1.8			
02	156	260	364	468	573	71	437	70.3	500	5.7	20.8	1.9	1450	55.2	1.5
						117	431	79.5	1000	5.7	20.8	1.9	1450	54.5	1.4
						162	426	84.1	1200	5.7	20.8	1.9	1450	53.9	1.4
		206	422	86.9		1500	5.7	20.8	1.9	1590	53.3	1.3			
		250	419	88.8		1500	5.7	20.8	2.0	1590	53.0	1.3			
03	210	341	472	604	735	93	536	75.5	800	5.9	21.3	1.9	1450	43.6	0.93
						150	532	82.9	1200	5.9	21.3	1.9	1450	43.4	0.87
						205	525	86.7	1500	5.9	21.3	1.9	1450	42.9	0.85
		258	518	88.9		1500	5.9	21.3	2.0	1590	42.3	0.84			
		310	512	90.4		1500	5.9	21.3	2.0	1590	41.8	0.84			
04	296	472	647	823	998	128	695	80.9	1000	5.8	21.3	1.9	1450	33.0	0.51
						201	688	86.6	1500	5.8	21.3	1.9	1450	32.7	0.49
						272	679	89.4	1500	5.8	21.3	2.0	1590	32.3	0.48
		339	667	91.1		1500	5.7	21.3	2.0	1590	31.8	0.48			
		402	653	92.2		1500	5.8	21.3	2.1	1740	31.2	0.48			
05	359	566	773	979	1186	158	836	83.6	1200	5.8	21.7	1.9	1450	27.7	0.35
						244	821	88.4	1500	5.7	21.7	2.0	1590	27.3	0.34
						325	803	90.7	1500	5.7	21.7	2.1	1740	26.7	0.34
		401	783	92.0		1500	5.8	21.7	2.1	1740	26.1	0.34			
		472	762	92.9		1500	5.7	21.7	2.2	1900	25.4	0.35			
06	466	727	987	1248	1510	199	1026	86.1	1500	6.0	21.7	2.0	1590	22.3	0.22
						301	997	90.0	1500	6.0	21.7	2.1	1740	21.7	0.22
						395	966	91.8	1500	6.0	21.7	2.2	1900	21.1	0.22
		479	929	92.8		1500	6.0	21.7	2.3	2060	20.4	0.23			
		551	886	93.3		1510	6.0	21.7	2.4	2230	19.5	0.24			

Technical Data

D400-3A

Applied to the cooling types of IC06, IC17,IC37,ICW 37A86

series no.	Rotating speed under the voltage below rated voltage UN r/min					Output PN kW	Rated current Ia A	Efficiency η %	Max. speed n_{max} r/min	Excitation power Pf kW	Moment of inertial J kg m ²	Ventilation		Armature circuit	
	220V	330V	440V	550V	660V							volume Q m ³ /s	pressure H Pa	voltage drop ΔU V	inductance La mH
01	96	168	239	311	382	54	371	61.8	350	6.5	24.8	2.1	1740	72.6	3.0
						93	364	73.8	600	6.6	24.8	2.0	1590	71.3	2.6
						132	363	79.7	800	6.6	24.8	2.1	1740	71.0	2.4
		171	362	83.4	1000	6.6	24.8	2.1	1740	70.8	2.3				
		209	360	85.9	1200	6.6	24.8	2.1	1740	70.4	2.3				
02	118	199	281	362	444	68	433	67.2	500	6.5	24.8	2.0	1590	61.0	2.1
						114	428	77.3	600	6.7	24.8	2.1	1740	60.3	1.9
						159	424	82.6	1000	6.6	24.8	2.1	1740	59.7	1.8
		204	422	85.6	1200	6.7	24.8	2.1	1740	59.4	1.7				
		247	417	87.8	1500	6.6	24.8	2.1	1740	58.8	1.7				
03	162	266	370	474	579	91	539	73.2	600	6.5	25.2	2.1	1740	48.9	1.2
						147	529	81.5	1000	6.5	25.2	2.1	1740	48.0	1.1
						203	526	85.6	1200	6.5	25.2	2.1	1740	47.7	1.1
		256	518	88.1	1500	6.6	25.2	2.1	1740	47.0	1.1				
		308	511	89.8	1500	6.5	25.2	2.2	1900	46.4	1.1				
04	229	366	504	642	780	126	698	79.1	800	6.5	25.2	2.1	1740	36.8	0.66
						199	688	85.4	1200	6.6	25.2	2.1	1740	36.3	0.63
						270	679	88.6	1500	6.6	25.2	2.1	1740	35.9	0.61
		338	668	90.5	1500	6.6	25.2	2.2	1900	35.4	0.61				
		403	657	91.7	1500	6.6	25.2	2.2	1900	34.8	0.62				
05	278	439	602	764	926	155	831	82.1	1000	6.6	25.7	2.1	1740	30.6	0.46
						242	821	87.4	1500	6.6	25.7	2.2	1900	30.2	0.44
						324	804	90.1	1500	6.6	25.7	2.2	1900	29.6	0.43
		402	787	91.6	1500	6.6	25.7	2.3	2060	29.0	0.44				
		474	766	92.6	1500	6.6	25.7	2.3	2060	28.3	0.44				
06	366	573	780	987	1195	197	1025	85.1	1200	6.6	25.7	2.1	1740	24.6	0.28
						300	999	89.4	1500	6.6	25.7	2.2	1900	24.1	0.28
						396	970	91.5	1500	6.6	25.7	2.3	2060	23.4	0.28
		482	935	92.7	1500	6.6	25.7	2.4	2230	22.6	0.29				
		558	896	93.4	1500	6.6	25.7	2.4	2230	21.8	0.29				

Technical Data

D400-4A

Applied to the cooling types of IC06, IC17,IC37,ICW 37A86

series no.	Rotating speed under the voltage below rated voltage UN r/min					Output PN kW	Rated current Ia A	Efficiency η %	Max. speed n_{max} r/min	Excitation power Pf kW	Moment of inertial J kg m ²	Ventilation		Armature circuit	
	220V	330V	440V	550V	660V							volume Q m ³ /s	pressure H Pa	voltage drop ΔU V	inductance La mH
01	72	129	186	243	300	50	360	57.8	300	8.0	29.7	2.3	2060	79.2	4.1
						90	365	70.7	500	7.7	29.7	2.3	2060	80.3	3.4
	300	243	186	243	128	359	77.6	600	7.7	29.7	2.3	2060	79.1	3.2	
					167	359	81.6	800	7.7	29.7	2.3	2060	79.1	3.0	
					204	356	84.4	1000	7.7	29.7	2.3	2060	78.3	3.0	
02	90	155	220	285	350	64	424	63.9	300	7.7	29.7	2.2	1900	67.2	2.8
						110	424	75.0	500	7.6	29.7	2.3	2060	67.1	2.4
	350	285	220	285	155	421	80.8	800	7.7	29.7	2.3	2060	66.6	2.3	
					199	417	84.3	1000	7.7	29.7	2.3	2060	66.0	2.2	
					243	415	86.6	1200	7.7	29.7	2.3	2060	65.7	2.2	
03	125	208	291	374	457	87	529	70.7	500	7.6	30.1	2.2	1900	53.2	1.6
						144	527	79.7	700	7.6	30.1	2.3	2060	53.0	1.4
	457	374	291	374	199	521	84.4	1000	7.6	30.1	2.3	2060	52.4	1.4	
					252	514	87.2	1200	7.6	30.1	2.3	2060	51.7	1.4	
					304	507	89.0	1500	7.6	30.1	2.3	2060	51.1	1.4	
04	178	287	397	507	617	122	690	76.9	500	7.6	30.1	2.3	2060	40.9	0.86
						196	687	83.9	1000	7.7	30.1	2.3	2060	40.7	0.80
	617	507	397	507	266	675	87.5	1200	7.7	30.1	2.3	2060	40.0	0.78	
					334	665	89.7	1500	7.7	30.1	2.4	2230	39.4	0.78	
					400	655	91.1	1500	7.6	30.1	2.4	2230	38.9	0.78	
05	217	346	475	604	734	152	830	80.3	800	7.7	30.6	2.3	2060	34.2	0.58
						238	815	86.2	1200	7.7	30.6	2.4	2230	33.6	0.56
	734	604	475	604	320	799	89.2	1500	7.7	30.6	2.4	2230	33.0	0.55	
					398	783	91.0	1550	7.7	30.6	2.4	2230	32.3	0.56	
					472	765	92.2	1500	7.7	30.6	2.5	2410	31.7	0.56	
06	287	451	616	781	946	193	1017	83.7	1000	7.6	30.6	2.3	2060	27.3	0.36
						296	993	88.5	1500	7.7	30.6	2.4	2230	26.7	0.35
	946	781	616	781	393	967	90.9	1500	7.6	30.6	2.4	2230	26.1	0.35	
					481	935	92.3	1500	7.6	30.6	2.5	2410	25.3	0.36	
					560	900	93.2	1500	7.6	30.6	2.5	2410	24.4	0.37	

Technical Data

D450-1A

Applied to the cooling types of IC06, IC17, IC37, ICW 37A86

series no.	Rotating speed under the voltage below rated voltage UN					Output PN kW	Rated current Ia A	Efficiency η %	Max. speed n_{max} r/min	Excitation power Pf kW	Moment of inertial J kg m ²	Ventilation		Armature circuit	
	r/min											volume Q m ³ /s	pressure H Pa	voltage drop ΔU V	inductance La mH
	220V	330V	440V	550V	660V										
01	185	302	420	538	656	96	562	74.4	600	5.6	35	2.0	1130	46.4	1.0
						155	555	82.3	1000	5.6	35	2.1	1230	45.9	0.97
						214	552	86.2	1200	5.6	35	2.1	1230	45.7	0.93
		270	545	88.5	1500	5.6	35	2.2	1340	45.1	0.92				
		325	539	90.1	1500	5.6	35	2.2	1340	44.6	0.92				
02	229	368	507	647	786	120	671	78.4	700	5.6	35	2.1	1230	38.4	0.71
						191	666	84.9	1000	5.6	35	2.1	1230	38.1	0.66
						260	658	88.1	1500	5.6	35	2.2	1340	37.7	0.65
		326	648	90.1	1500	5.6	35	2.2	1340	37.2	0.65				
		390	639	91.3	1500	5.6	35	2.3	1450	36.6	0.65				
03	291	460	629	799	968	152	817	82.1	1000	5.6	37.2	2.1	1230	30.6	0.46
						237	806	87.3	1500	5.6	37.2	2.1	1230	30.2	0.44
						318	792	89.9	1500	5.6	37.2	2.2	1340	29.7	0.44
		394	774	91.4	1500	5.6	37.2	2.3	1450	29.1	0.44				
		466	756	92.4	1500	5.6	37.2	2.4	1570	28.4	0.44				
04	419	654	888	1124	1360	213	1106	85.7	1500	5.6	37.2	2.2	1340	23.9	0.23
						325	1082	89.7	1500	5.6	37.2	2.3	1450	23.4	0.23
						429	1052	91.6	1500	5.6	37.2	2.4	1570	22.8	0.23
		526	1022	92.7	1500	5.6	37.2	2.5	1690	22.2	0.24				
		614	988	93.4	1500	5.6	37.2	2.7	1950	21.5	0.24				
05	505	783	1062	1342		258	1316	87.5	1500	5.6	39.5	2.3	1450	19.8	0.16
						388	1278	90.8	1500	5.6	39.5	2.4	1570	19.3	0.16
		506	1232	92.4	1500	5.6	39.5	2.6	1810	18.7	0.17				
		610	1180	93.2	1500	5.6	39.5	2.7	1950	18.0	0.17				
06	626	965	1304			315	1580	89.2	1500	5.6	39.5	2.4	1570	15.8	0.11
						463	1512	91.8	1500	5.6	39.5	2.5	1690	15.2	0.11
		589	1428	92.9	1500	5.6	39.5	2.8	2080	14.5	0.12				

Technical Data

D450-2A

Applied to the cooling types of IC06, IC17,IC37,ICW 37A86

series no.	Rotating speed under the voltage below rated voltage UN r/min					Output PN kW	Rated current Ia A	Efficiency η %	Max. speed n_{max} r/min	Excitation power Pf kW	Moment of inertial J kg m ²	Ventilation		Armature circuit	
	220V	330V	440V	550V	660V							volume Q m ³ /s	pressure H Pa	voltage drop ΔU V	inductance La mH
01	144	237	330	424	517	94	563	72.4	500	6.5	40.8	2.2	1340	50.5	1.3
						154	559	80.9	800	6.5	40.8	2.3	1450	50.2	1.2
	213	555	85.2	1000	6.5	40.8	2.3	1450	49.9	1.2					
	270	548	87.8	1500	6.5	40.8	2.3	1450	49.3	1.2					
	326	543	89.5	1500	6.5	40.8	2.4	1570	48.8	1.2					
02	179	289	399	509	621	118	674	76.5	600	6.5	40.8	2.3	1450	42.3	0.90
						189	666	83.7	1000	6.5	40.8	2.3	1450	41.9	0.85
	259	661	87.3	1200	6.5	40.8	2.4	1570	41.5	0.82					
	325	650	89.4	1500	6.5	40.8	2.4	1570	40.9	0.82					
	390	641	90.9	1500	6.5	40.8	2.4	1570	40.4	0.82					
03	227	361	495	629	764	150	818	80.7	800	6.5	43.1	2.2	1340	33.5	0.58
						236	809	86.4	1200	6.5	43.1	2.3	1450	33.2	0.56
	317	793	89.3	1500	6.5	43.1	2.4	1570	32.6	0.55					
	395	778	91.0	1500	6.5	43.1	2.4	1570	32.0	0.55					
	468	761	92.1	1500	6.5	43.1	2.5	1690	31.3	0.56					
04	328	515	702	888	1076	211	1105	84.7	1200	6.5	43.1	2.4	1570	25.8	0.30
						325	1087	89.1	1500	6.5	43.1	2.5	1690	25.4	0.29
	431	1059	91.3	1500	6.5	43.1	2.5	1690	24.8	0.29					
	530	1030	92.6	1500	6.5	43.1	2.6	1810	24.2	0.30					
	620	997	93.4	1500	6.5	43.1	2.7	1950	23.5	0.30					
05	397	618	840	1061		257	1320	86.7	1200	6.5	45.4	2.5	1690	21.7	0.21
						389	1285	90.4	1500	6.5	45.4	2.6	1810	21.2	0.20
	509	1241	92.2	1500	6.5	45.4	2.7	1950	20.5	0.21					
	617	1193	93.2	1550	6.5	45.4	2.8	2080	19.8	0.21					
06	493	761	1030			315	1587	88.7	1500	6.5	45.4	2.5	1690	17.3	0.14
						466	1523	91.6	1500	6.5	45.4	2.7	1950	16.7	0.14
	596	1443	93.0	1500	6.5	45.4	2.8	2080	15.9	0.15					

Technical Data

D450-3A

Applied to the cooling types of IC06, IC17,IC37,ICW 37A86

series no.	Rotating speed under the voltage below rated voltage UN r/min					Output PN kW	Rated current Ia A	Efficiency η %	Max. speed nmax r/min	Excitation power Pf kW	Moment of inertial J kg m ²	Ventilation		Armatures circuit	
	220V	330V	440V	550V	660V							volume Q m ³ /s	pressure H Pa	voltage drop ΔU V	inductance La mH
01	112	187	262	337	412	91	563	69.7	350	6.7	48.2	2.4	1570	56.3	1.7
						151	558	79.1	600	6.7	48.2	2.5	1690	55.8	1.6
						210	554	83.9	800	6.7	48.2	2.5	1690	55.4	1.5
		267	547	86.8	1000	6.7	48.2	2.5	1690	54.8	1.5				
		323	542	88.7	1200	6.7	48.2	2.5	1690	54.2	1.5				
02	140	229	318	406	496	115	674	74.2	500	6.7	48.2	2.5	1690	47.1	1.2
						186	666	82.2	800	6.7	48.2	2.5	1690	46.5	1.1
						256	660	86.2	1000	6.7	48.2	2.5	1690	46.1	1.0
		323	650	88.6	1200	6.7	48.2	2.6	1810	45.5	1.0				
		388	641	90.3	1500	6.7	48.2	2.6	1810	44.9	1.0				
03	180	287	395	503	611	147	816	79.0	600	6.7	50.5	2.4	1570	37.2	0.74
						232	804	85.3	800	6.7	50.5	2.5	1690	36.7	0.71
						315	793	88.5	1200	6.7	50.5	2.5	1690	36.2	0.69
		393	778	90.4	1500	6.7	50.5	2.6	1810	35.5	0.69				
		467	762	91.7	1500	6.7	50.5	2.6	1810	34.8	0.70				
04	261	411	561	712	863	208	1103	83.5	800	6.7	50.5	2.5	1690	28.6	0.38
						322	1084	88.4	1500	6.7	50.5	2.6	1810	28.1	0.36
						430	1061	90.8	1500	6.7	50.5	2.7	1950	27.6	0.36
		531	1035	92.3	1500	6.7	50.5	2.8	2080	26.9	0.37				
		624	1005	93.2	1500	6.7	50.5	2.8	2080	26.2	0.38				
05	316	494	672	850		254	1318	85.7	1000	6.7	52.8	2.6	1810	24.0	0.26
						387	1286	89.8	1500	6.7	52.8	2.7	1950	23.5	0.26
		509	1244	91.9	1500	6.7	52.8	2.8	2080	22.8	0.26				
		620	1200	93.0	1500	6.7	52.8	2.9	2230	22.0	0.27				
06	393	609	827			312	1582	87.9	1200	6.7	52.8	2.6	1810	19.1	0.17
						465	1524	91.2	1500	6.7	52.8	2.8	2080	18.4	0.18
		599	1452	92.8	1500	6.7	52.8	2.9	2230	17.7	0.18				

Technical Data

D450-4A

Applied to the cooling types of IC06, IC17,IC37,ICW 37A86

series no.	Rotating speed under the voltage below rated voltage UN					Output PN kW	Rated current Ia A	Efficiency η %	Max. speed n_{max} r/min	Excitation power Pf kW	Moment of inertial J kg m ²	Ventilation		Armature circuit	
	r/min											volumetric Q m ³ /s	pressure H Pa	voltage drop ΔU V	inductance La mH
	220V	330V	440V	550V	660V										
01	86	146	205	265	325	86	554	66.6	300	7.5	57.8	2.7	1950	62.7	2.3
						146	553	76.9	500	7.5	57.8	2.7	1950	62.6	2.0
	205	265	325	204	547	82.2	700	7.5	57.8	2.7	1950	61.9	1.9		
				262	544	85.4	800	7.5	57.8	2.8	2080	61.6	1.9		
				318	539	87.6	1000	7.5	57.8	2.8	2080	61.0	1.9		
02	108	180	250	321	392	111	669	71.6	350	7.5	57.8	2.7	1950	52.0	1.5
						181	658	80.6	600	7.5	57.8	2.7	1950	51.2	1.4
	250	321	392	251	654	85.0	800	7.5	57.8	2.7	1950	50.9	1.3		
				318	646	87.7	1000	7.5	57.8	2.8	2080	50.3	1.3		
				383	637	89.5	1200	7.5	57.8	2.8	2080	49.6	1.3		
03	140	226	312	398	485	142	807	76.7	500	7.5	60.1	2.7	1950	41.6	0.96
						227	797	83.9	800	7.5	60.1	2.7	1950	41.1	0.90
	312	398	485	309	786	87.4	1000	7.5	60.1	2.7	1950	40.5	0.89		
				388	773	89.6	1200	7.5	60.1	2.8	2080	39.9	0.88		
				463	759	91.1	1500	7.5	60.1	2.8	2080	39.2	0.88		
04	204	324	443	564	683	203	1095	81.8	600	7.5	60.1	2.8	2080	32.0	0.48
						317	1078	87.3	1000	7.5	60.1	2.9	2230	31.5	0.47
	443	564	683	425	1056	90.0	1500	7.5	60.1	2.9	2230	30.9	0.46		
				527	1031	91.7	1500	7.5	60.1	2.9	2230	30.2	0.47		
				622	1005	92.8	1500	7.5	60.1	3.0	2370	29.5	0.47		
05	249	390	532	674		249	1309	84.3	800	7.5	62.4	2.9	2230	26.9	0.33
						382	1278	88.9	1200	7.5	62.4	2.9	2230	26.3	0.33
	532	674		505	1240	91.3	1500	7.5	62.4	3.0	2370	25.6	0.33		
				619	1201	92.6	1550	7.5	62.4	3.0	2370	24.8	0.33		
06	310	484	655			308	1573	87.1	1000	7.5	62.4	2.8	2080	20.9	0.22
						461	1516	90.8	1500	7.5	62.4	2.9	2230	20.2	0.22
							598	1452	92.5	1500	7.5	62.4	3.0	2370	19.4

Technical Data

D500-1A

Applied to the cooling types of IC06, IC17,IC37,ICW 37A86

series no.	Rotating speed under the voltage below rated voltage UN r/min					Output PN kW	Rated current Ia A	Efficiency η %	Max. speed n_{max} r/min	Excitation power Pf kW	Moment of inertial J kg m ²	Ventilation		Armature circuit	
	220V	330V	440V	550V	660V							volume Q m ³ /s	pressure H Pa	voltage drop ΔU V	inductance La mH
01	205	327	449	572	693	163	891	80.4	600	5.8	68.4	2.4	1050	34.2	0.40
						256	879	86.3	1000	5.8	68.4	2.5	1130	33.8	0.39
	345	863	89.3	1200	5.8	68.4	2.6	1210	33.2	0.38					
	430	847	91.0	1200	5.8	68.4	2.6	1210	32.6	0.38					
	510	828	92.2	1200	5.8	68.4	2.7	1290	32.0	0.42					
02	246	388	530	671	814	199	1055	83.3	800	5.8	68.4	2.4	1050	28.3	0.29
						308	1038	88.2	1200	5.8	68.4	2.5	1130	27.9	0.27
	410	1013	90.7	1200	5.8	68.4	2.6	1210	27.2	0.27					
	505	985	92.1	1200	5.8	68.4	2.7	1290	26.6	0.28					
	593	956	93.0	1200	5.8	68.4	2.7	1290	25.8	0.29					
03	333	520	707	894	1082	261	1346	86.2	1000	5.8	70.1	2.6	1210	22.6	0.17
						395	1308	90.1	1200	5.8	70.1	2.7	1290	22.0	0.16
	517	1262	92.0	1200	5.8	70.1	2.8	1380	21.3	0.17					
	627	1213	93.1	1200	5.8	70.1	2.9	1470	20.6	0.17					
	721	1155	93.7	1200	5.8	70.1	3.0	1560	19.7	0.18					
04	447	692	936	1180		344	1731	88.8	1200	5.8	73.6	2.7	1290	17.2	0.10
						508	1658	91.7	1200	5.8	73.6	2.8	1380	16.6	0.10
	652	1576	93.1	1200	5.8	73.6	3.0	1560	15.9	0.10					
	769	1478	93.8	1200	5.8	73.6	3.1	1660	15.0	0.11					
05	526	810	1095			406	2024	89.8	1200	5.8	73.6	2.8	1380	14.9	0.07
						590	1916	92.3	1200	5.8	73.6	3.0	1560	14.2	0.07
	737	1778	93.4	1200	5.8	73.6	3.2	1760	13.3	0.07					
06															

Technical Data

D500-2A

Applied to the cooling types of IC06, IC17,IC37,ICW 37A86

series no.	Rotating speed under the voltage below rated voltage UN					Output PN kW	Rated current Ia A	Efficiency η %	Max. speed n_{max} r/min	Excitation power Pf kW	Moment of inertial J kg m ²	Ventilation		Armature circuit	
	r/min											volume Q m ³ /s	pressure H Pa	voltage drop ΔU V	inductance La mH
	220V	330V	440V	550V	660V										
01	160	257	353	450	546	158	880	78.6	500	6.5	81.1	2.6	1210	37.9	0.53
						251	871	85.1	800	6.5	81.1	2.7	1290	37.5	0.50
	450	546	340	857	88.4	1000	6.5	81.1	2.7	1290	36.9	0.49			
			425	842	90.3	1200	6.5	81.1	2.8	1380	36.3	0.49			
			506	825	91.6	1200	6.5	81.1	2.8	1380	35.6	0.50			
02	193	305	417	530	642	194	1044	81.8	600	6.5	81.1	2.6	1210	31.3	0.37
						302	1026	87.3	1000	6.5	81.1	2.7	1290	30.8	0.35
	530	642	405	1006	90.0	1200	6.5	81.1	2.8	1380	30.2	0.35			
			501	981	91.6	1200	6.5	81.1	2.8	1380	29.5	0.35			
			590	953	92.7	1200	6.5	81.1	2.9	1470	28.5	0.36			
03	261	410	558	706	854	256	1331	85.2	800	6.5	82.9	2.7	1290	24.4	0.21
						390	1297	89.6	1000	6.5	82.9	2.8	1380	23.9	0.21
	706	854	514	1257	91.7	1200	6.5	82.9	2.9	1470	23.2	0.21			
			626	1212	92.9	1200	6.5	82.9	2.9	1470	22.4	0.21			
			724	1160	93.7	1200	6.5	82.9	3.0	1560	21.6	0.22			
04	352	546	740	934		339	1717	88.0	1000	6.5	86.3	2.8	1380	19.0	0.12
						505	1653	91.3	1200	6.5	86.3	2.9	1470	18.3	0.12
	934		651	1575	92.9	1200	6.5	86.3	3.0	1560	17.6	0.13			
			774	1487	93.8	1200	6.5	86.3	3.1	1660	16.7	0.13			
05	414	641	866			402	2010	89.4	1200	6.5	86.3	2.9	1470	15.9	0.09
						588	1911	92.2	1200	6.5	86.3	3.1	1660	15.3	0.09
							742	1788	93.4	1200	6.5	86.3	3.2	1760	14.4
06															

Technical Data

D500-3A

Applied to the cooling types of IC06, IC17,IC37,ICW 37A86

series no.	Rotating speed under the voltage below rated voltage UN r/min					Output PN kW	Rated current Ia A	Efficiency η %	Max. speed n_{max} r/min	Excitation power Pf kW	Moment of inertial J kg m ²	Ventilation		Armature circuit	
	220V	330V	440V	550V	660V							volume Q m ³ /s	pressure H Pa	voltage drop ΔU V	inductance La mH
01	126	204	282	361	438	152	865	76.5	400	7.7	95.8	2.9	1470	41.9	0.67
						244	858	83.6	600	7.7	95.8	3.0	1560	41.5	0.63
						332	844	87.3	1000	7.7	95.8	3.0	1560	40.9	0.62
						416	829	89.6	1200	7.7	95.8	3.0	1560	40.2	0.62
						497	814	91.0	1200	7.7	95.8	3.0	1560	39.5	0.62
02	153	243	333	425	515	188	1028	80.1	500	7.7	95.8	2.9	1470	34.6	0.47
						294	1008	86.1	700	7.7	95.8	2.9	1470	34.0	0.45
						396	990	89.2	1000	7.7	95.8	3.0	1560	33.4	0.45
						492	967	91.0	1200	7.7	95.8	3.0	1560	32.7	0.45
						581	942	92.2	1200	7.7	95.8	3.0	1560	31.9	0.45
03	208	328	448	567	687	249	1309	83.9	600	7.7	97.6	3.0	1560	26.9	0.27
						381	1275	88.7	1000	7.7	97.6	3.0	1560	26.3	0.27
						504	1238	91.1	1200	7.7	97.6	3.0	1560	25.5	0.27
						617	1197	92.5	1200	7.7	97.6	3.1	1660	24.8	0.27
						717	1150	93.4	1200	7.7	97.6	3.1	1660	23.9	0.28
04	282	437	594	750		331	1690	87.0	1000	7.7	101	3.1	1660	20.9	0.15
						496	1630	90.7	1200	7.7	101	3.1	1660	20.2	0.15
						643	1560	92.5	1200	7.7	101	3.2	1760	19.4	0.16
						769	1479	93.6	1200	7.7	101	3.2	1870	18.5	0.17
05	332	514	696			394	1981	88.6	1000	7.7	101	3.1	1660	17.5	0.11
						579	1886	91.7	1200	7.7	101	3.2	1760	16.7	0.11
						736	1775	93.2	1200	7.7	101	3.3	1870	15.9	0.11
06															

Technical Data

D500-4A

Applied to the cooling types of IC06, IC17,IC37,ICW 37A86

series no.	Rotating speed under the voltage below rated voltage UN r/min					Output PN kW	Rated current Ia A	Efficiency η %	Max. speed n_{max} r/min	Excitation power Pf kW	Moment of inertial J kg m ²	Ventilation		Armature circuit	
	220V	330V	440V	550V	660V							volume Q m ³ /s	pressure H Pa	voltage drop ΔU V	inductance La mH
01	98	160	223	285	348	144	842	73.8	300	8.6	115.3	3.1	1660	46.7	0.89
						233	832	81.9	500	8.6	115.3	3.2	1760	46.2	0.83
						319	820	86.1	650	8.6	115.3	3.2	1760	45.5	0.81
		403	810			88.5	1000	8.6	115.3	3.2	1760	45.0	0.80		
		482	795			90.2	1200	8.6	115.3	3.2	1760	44.2	0.80		
02	119	192	264	338	410	179	999	77.9	350	8.6	115.3	3.1	1660	38.4	0.62
						283	982	84.7	600	8.6	115.3	3.1	1660	37.8	0.59
						383	965	88.1	800	8.6	115.3	3.2	1760	37.2	0.58
		477	944			90.2	1000	8.6	115.3	3.2	1760	36.4	0.58		
		566	922			91.6	1200	8.6	115.3	3.2	1760	35.6	0.59		
03	164	260	355	451	546	239	1275	82.3	500	8.6	117	3.2	1760	29.9	0.36
						368	1242	87.7	800	8.6	117	3.2	1760	29.1	0.34
						490	1210	90.4	1200	8.6	117	3.2	1760	28.4	0.34
		602	1173			91.9	1200	8.6	117	3.3	1870	27.6	0.35		
		703	1131			93.0	1200	8.6	117	3.3	1870	26.7	0.36		
04	223	347	472	598		319	1645	85.8	650	8.6	120.5	3.3	1870	23.1	0.2
						481	1590	90.0	1000	8.6	120.5	3.3	1870	22.4	0.2
						627	1526	92.0	1200	8.6	120.5	3.3	1870	21.6	0.21
		755	1455			93.2	1200	8.6	120.5	3.4	1970	20.7	0.21		
05	264	409	554			381	1931	87.7	800	8.6	120.5	3.3	1870	19.3	0.15
						565	1848	91.2	1200	8.6	120.5	3.4	1970	18.6	0.15
		723				1747	92.9	1200	8.6	120.5	3.4	1970	17.7	0.15	
06															

Technical Data

D560-2A

Applied to the cooling types of IC06, IC17,IC37,ICW 37A86

series no.	Rotating speed under the voltage below rated voltage UN r/min					Output PN kW	Rated current Ia A	Efficiency η %	Max. speed n_{max} r/min	Excitation power Pf kW	Moment of inertial J kg m ²	Ventilation		Armature circuit	
	220V	330V	440V	550V	660V							volume Q m ³ /s	pressure H Pa	voltage drop ΔU V	inductance La mH
01	153	244	336	429	521	196	1094	78.8	500	7.8	126.1	3.3	1310	37.5	0.44
						309	1075	85.1	800	7.8	126.1	3.3	1310	36.9	0.42
	410	520	418	1057	88.3	1000	7.8	126.1	3.4	1380	36.3	0.41			
			522	1037	90.2	1200	7.8	126.1	3.5	1450	35.7	0.41			
			619	1013	91.4	1200	7.8	126.1	3.6	1530	34.9	0.42			
02	189	300	410	520	630	245	1312	82.6	700	7.8	128.8	3.2	1240	29.7	0.30
						380	1290	87.6	1000	7.8	128.8	3.3	1310	29.2	0.29
	410	520	507	1260	90.1	1200	7.8	128.8	3.4	1380	28.6	0.29			
			624	1224	91.6	1200	7.8	128.8	3.5	1450	27.8	0.29			
			732	1186	92.6	1200	7.8	128.8	3.6	1530	27.0	0.29			
03	251	393	536	678	820	320	1676	84.9	800	7.8	128.8	3.5	1450	25.2	0.17
						487	1630	89.2	1200	7.8	128.8	3.6	1530	24.5	0.17
	536	678	641	1578	91.3	1200	7.8	128.8	3.8	1690	23.8	0.17			
			780	1519	92.5	1200	7.8	128.8	3.9	1770	23.0	0.18			
			900	1451	93.2	1200	7.8	128.8	4.0	1860	22.0	0.18			
04	307	477	646	816		393	2005	87.5	1000	7.8	134.3	3.5	1450	19.5	0.12
						586	1931	90.8	1200	7.8	134.3	3.6	1530	18.9	0.12
	477	646	816		757	1843	92.4	1200	7.8	134.3	3.8	1690	18.1	0.12	
					900	1740	93.3	1200	7.8	134.3	4.0	1860	17.2	0.12	
05															
06															

Technical Data

D560-3A

Applied to the cooling types of IC06, IC17,IC37,ICW 37A86

series no.	Rotating speed under the voltage below rated voltage UN r/min					Output PN kW	Rated current Ia A	Efficiency η %	Max. speed n_{max} r/min	Excitation power Pf kW	Moment of inertial J kg m ²	Ventilation		Armature circuit	
	220V	330V	440V	550V	660V							volume Q m ³ /s	pressure H Pa	voltage drop ΔU V	inductance La mH
01	121	195	270	345	419	191	1089	76.9	400	8.7	150.8	3.6	1530	41.6	0.56
						305	1075	83.8	700	8.7	150.8	3.6	1530	41.1	0.53
						414	1056	87.4	800	8.7	150.8	3.7	1610	40.4	0.51
		519	1038			89.5	1000	8.7	150.8	3.8	1690	39.7	0.51		
		618	1016			90.9	1200	8.7	150.8	3.8	1690	39.0	0.52		
02	151	240	329	418	508	241	1312	81.0	500	8.7	153.5	3.5	1450	33.0	0.37
						375	1284	86.6	800	8.7	153.5	3.6	1530	32.3	0.36
						503	1257	89.5	1000	8.7	153.5	3.7	1610	31.7	0.35
		622	1225			91.1	1200	8.7	153.5	3.7	1610	30.9	0.36		
		733	1191			92.2	1200	8.7	153.5	3.8	1690	30.1	0.37		
03	200	315	431	546	662	315	1670	83.7	700	8.7	153.5	3.8	1690	27.8	0.22
						483	1628	88.4	1000	8.7	153.5	3.9	1770	27.2	0.21
						639	1579	90.8	1200	8.7	153.5	4.0	1860	26.4	0.21
		781	1524			92.2	1200	8.7	153.5	4.1	1950	25.6	0.22		
		907	1463			93.0	1200	8.7	153.5	4.2	2030	24.6	0.23		
04	246	384	521	658		389	2000	86.6	800	8.7	159.0	3.7	1610	21.6	0.15
						584	1932	90.3	1200	8.7	159.0	3.9	1770	20.9	0.15
						758	1849	92.1	1200	8.7	159.0	4.0	1860	20.1	0.15
		908	1756			93.1	1200	8.7	159.0	4.1	1950	19.2	0.16		
05															
06															

Technical Data

D560-4A

Applied to the cooling types of IC06, IC17,IC37,ICW 37A86

series no.	Rotating speed under the voltage below rated voltage UN r/min					Output PN kW	Rated current Ia A	Efficiency η %	Max. speed n_{max} r/min	Excitation power Pf kW	Moment of inertial J kg m ²	Ventilation		Armature circuit	
	220V	330V	440V	550V	660V							volume Q m ³ /s	pressure H Pa	voltage drop ΔU V	inductance La mH
01	94	154	213	275	334	184	1079	74.2	300	9.7	183.4	3.9	1770	46.8	0.73
						297	1064	82.1	500	9.7	183.4	4.0	1860	46.2	0.67
						406	1047	86.1	600	9.7	183.4	4.0	1860	45.5	0.66
		511	1030	88.6	800	9.7	183.4	4.1	1950	44.8	0.65				
		611	1011	90.2	1000	9.7	183.4	4.1	1950	44.0	0.65				
02	119	190	262	334	406	233	1294	79.0	400	9.7	186.2	3.8	1690	36.9	0.48
						368	1276	85.3	700	9.7	186.2	3.9	1770	36.4	0.45
						495	1247	88.5	800	9.7	186.2	3.9	1770	35.7	0.45
		616	1220	90.4	1000	9.7	186.2	4.0	1860	34.9	0.45				
		728	1188	91.7	1200	9.7	186.2	4.1	1950	34.1	0.46				
03	158	250	343	436	529	308	1654	82.3	500	9.7	186.2	4.1	1950	30.5	0.28
						476	1615	87.6	800	9.7	186.2	4.1	1950	29.9	0.27
						633	1571	90.2	1000	9.7	186.2	4.2	2030	29.1	0.27
		777	1521	91.8	1200	9.7	186.2	4.3	2130	28.2	0.28				
		907	1466	92.7	1200	9.7	186.2	4.4	2220	27.3	0.29				
04	196	305	415	525		381	1981	85.4	600	9.7	191.6	4.0	1860	24.1	0.19
						577	1921	89.6	1000	9.7	191.6	4.1	1950	23.5	0.19
						753	1844	91.6	1200	9.7	191.6	4.2	2030	22.6	0.19
		908	1760	92.8	1200	9.7	191.6	4.3	2130	21.7	0.20				
05															
06															

Technical Data

D630-2A

Applied to the cooling types of IC06, IC17,IC37,ICW 37A86

series no.	Rotating speed under the voltage below rated voltage UN r/min					Output PN kW	Rated current I _a A	Efficiency η %	Max. speed n _{max} r/min	Excitation power P _f kW	Moment of inertial J kg m ²	Ventilation	
	440V	550V	660V	750V	volume Q m ³ /s							pressure H Pa	
01	330	425	515	590	564	1410	91.5	1000	12.4	276	3.8	1140	
					697	1366	92.8	1200	12.4	276	3.9	1190	
					821	1330	93.5	1200	12.4	276	4.1	1300	
					915	1298	94.0	1200	12.4	276	4.2	1360	
02	390	490	598	677	662	1633	92.2	1200	12.4	280	4.0	1240	
					811	1581	93.2	1200	12.4	280	4.2	1360	
					946	1527	93.9	1200	12.4	280	4.4	1480	
					1045	1479	94.2	1200	12.4	280	4.5	1540	
03	420	535	650	750	723	1769	92.9	1100	12.4	282	4.0	1240	
					879	1705	93.8	1200	12.4	282	4.2	1360	
					1019	1638	94.2	1200	12.4	282	4.4	1480	
					1118	1578	94.5	1200	12.4	282	4.6	1610	
04	530	665	810		839	2052	92.9	1200	12.4	285	4.5	1540	
					1010	1960	93.7	1200	12.4	285	4.7	1670	
					1157	1863	94.1	1200	12.4	285	5.0	1870	

D630-3A

Applied to the cooling types of IC06, IC17,IC37,ICW 37A86

series no.	Rotating speed under the voltage below rated voltage UN r/min					Output PN kW	Rated current I _a A	Efficiency η %	Max. speed n _{max} r/min	Excitation power P _f kW	Moment of inertial J kg m ²	Ventilation	
	440V	550V	660V	750V	volume Q m ³ /s							pressure H Pa	
01	260	340	411	474	561	1403	90.9	800	13.8	310	4.1	1300	
					697	1372	92.4	1000	13.8	310	4.2	1360	
					825	1340	93.3	1000	13.8	310	4.3	1420	
					922	1311	93.8	1000	13.8	310	4.4	1480	
02	310	395	481	545	660	1636	91.7	900	13.8	318	4.3	1420	
					813	1590	93.0	1000	13.8	318	4.4	1480	
					954	1542	93.7	1000	13.8	318	4.6	1610	
					1058	1498	94.2	1000	13.8	318	4.7	1670	
03	340	431	521	595	723	1776	92.5	1000	13.8	320	4.3	1420	
					884	1717	93.6	1000	13.8	320	4.4	1480	
					1030	1657	94.2	1000	13.8	320	4.6	1610	
					1135	1601	94.5	1000	13.8	320	4.7	1670	
04	425	535	650		840	2061	92.6	1000	13.8	325	4.8	1730	
					1019	1979	93.6	1000	13.8	325	4.9	1800	
					1177	1894	94.2	1000	13.8	325	5.1	1940	

Technical Data

D630-4A

Applied to the cooling types of IC06, IC17,IC37,ICW 37A86

series no.	Rotating speed under the voltage below rated voltage UN					Output PN kW	Rated current I _a A	Efficiency η %	Max. speed n _{max} r/min	Excitation power P _f kW	Moment of inertial J kg m ²	Ventilation	
	r/min											volume Q m ³ /s	pressure H Pa
	440V	550V	660V	750V									
01	211					555	1400	90.0	600	15.8	365	4.5	1540
		260				692	1371	91.8	800	15.8	365	4.6	1610
			325			822	1341	92.8	800	15.8	365	4.6	1610
				765		923	1317	93.5	800	15.8	365	4.7	1670
02	247					654	1633	91.0	800	15.8	370	4.7	1670
		310				810	1592	92.5	800	15.8	370	4.8	1730
			381			955	1549	93.4	800	15.8	370	4.9	1800
				435		1064	1510	94.0	800	15.8	370	4.9	1800
03	270					717	1771	92.0	800	15.8	370	4.6	1610
		345				882	1720	93.2	800	15.8	370	4.7	1670
			415			1033	1665	94.0	800	15.8	370	4.8	1730
				475		1150	1624	94.4	900	15.8	370	4.9	1800
04	335					826	2061	92.2	800	15.8	380	5.1	1940
		425				1021	1989	93.3	800	15.8	380	5.2	2020
			515			1188	1914	94.0	800	15.8	380	5.3	2090

Water-Air(ICW37A86)

Cooler type	Weight (kg)	Fan motor (kw)
LAM-D315-1	470	2.2
LAM-D315-2	473	
LAM-D315-3	480	
LAM-D315-4	491	
LAM-D355-2	640	5.5
LAM-D355-3	650	
LAM-D355-4	660	
LAM-D355-5	675	
LAM-D400-1	704	7.5
LAM-D400-2	715	
LAM-D400-3	726	
LAM-D400-4	739	
LAM-D450-1	808	7.5
LAM-D450-2	820	
LAM-D450-3	834	
LAM-D450-4	850	
LAM-D500-1	900	7.5
LAM-D500-2	910	
LAM-D500-3	930	
LAM-D500-4	950	
LAM-D560-2	1030	15.0
LAM-D560-3	1050	
LAM-D560-4	1070	
LAM-D560-5	1100	

Technical data

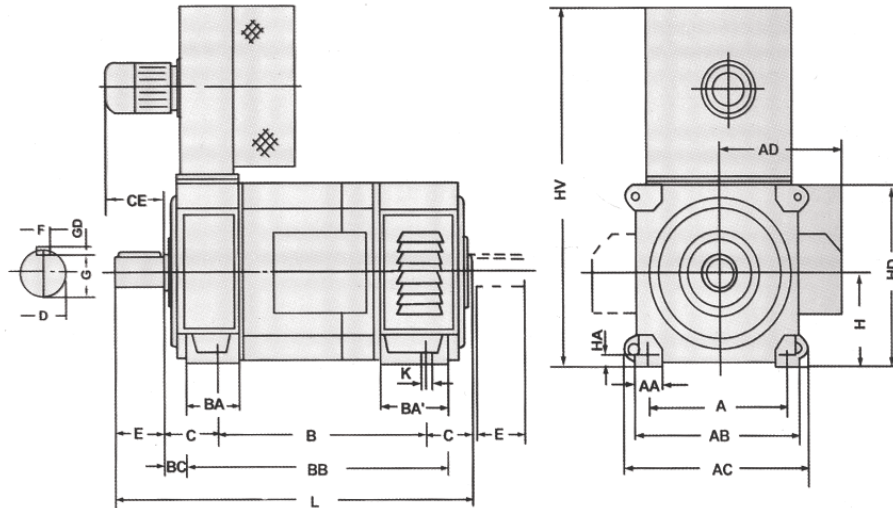
D.C Motor Weight

Motor type	Weight (kg)
D315-1	1350
D315-2	1500
D315-3	1700
D315-4	1950
D355-2	1950
D355-3	2200
D355-4	2500
D355-5	2850
D400-1	2450
D400-2	2700
D400-3	3250
D400-4	3700
D450-1	3700
D450-2	4100
D450-3	4600
D450-4	5200
D500-1	4800
D500-2	5300
D500-3	6000
D500-4	6800
D560-2	6600
D560-3	7100
D560-4	7800
D560-5	8700

LAW Series Water-air Cooler is used for D Series DC machine. This special cooler is to be supplied by Jiangsu Dongyuan Electrical Machines Control Co., LTD. to make a complete equipment

Outline drawing and dimensions

1. With blower(IC06)

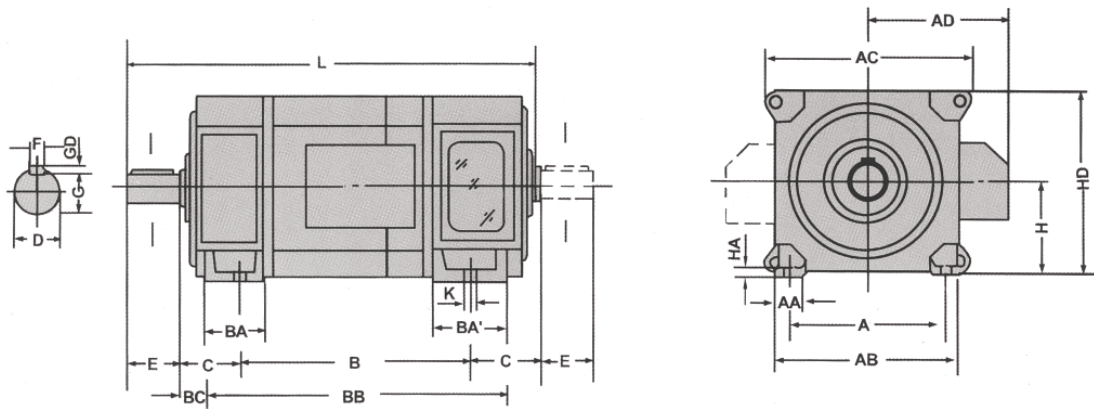


Type	Main dimensions					Foot dimensions										Shaft extension dimension					Dimensions of blower and terminal box		
	H*	L	C	AC	HD	A	B	K	HA	AB	BB	AA	BA	BA	BC	D*	E	F*	G	GD*	CE	HV	AD
D315-1	315	1372	216	720	635	508	770	28	25	620	985	115	230	280	124	90	170	25	81	14	330	1400	490
D315-2	315	1452	216	720	635	508	850	28	25	620	1065	115	230	280	124	90	170	25	81	14	330	1400	490
D315-3	315	1532	216	720	635	508	930	28	25	620	1145	115	230	280	124	90	170	25	81	14	330	1400	490
D315-4	315	1632	216	720	635	508	1030	28	25	620	1245	115	230	280	124	90	170	25	81	14	330	1400	490
D355-2	355	1515	254	800	720	610	800	28	35	700	1110	120	280	320	124	110	210	28	100	16	240	1535	630
D355-3	355	1615	254	800	720	610	900	28	35	700	1210	120	280	320	124	110	210	28	100	16	240	1535	630
D355-4	355	1715	254	800	720	610	1000	28	35	700	1310	120	280	320	124	110	210	28	100	16	240	1535	630
D355-5	355	1835	254	800	720	610	1120	28	35	700	1430	120	280	320	124	110	210	28	100	16	240	1535	630
D400-1	400	1560	280	906	810	686	800	35	30	790	1180	115	280	380	95	120	210	32	109	18	230	1705	670
D400-2	400	1660	280	906	810	686	900	35	30	790	1280	115	280	380	95	120	210	32	109	18	230	1705	670
D400-3	400	1760	280	906	810	686	1000	35	30	790	1380	115	280	380	95	120	210	32	109	18	230	1705	670
D400-4	400	1880	280	906	810	686	1120	35	30	790	1500	115	280	380	95	120	210	32	109	18	230	1705	670
D450-1	450	1775	315	1000	910	800	900	35	40	890	1334	120	340	360	93	140	250	36	128	20	260	1805	725
D450-2	450	1875	315	1000	910	800	1000	35	40	890	1434	120	340	360	93	140	250	36	128	20	260	1805	725
D450-3	450	1995	315	1000	910	800	1120	35	40	890	1554	120	340	360	93	140	250	36	128	20	260	1805	725
D450-4	450	2125	315	1000	910	800	1250	35	40	890	1684	120	340	360	93	140	250	36	128	20	260	1805	725
D500-1	500	1860	280	1070	1010	900	1000	42	45	1090	1345	180	320	350	105	160	300	40	147	22	290	1905	815
D500-2	500	1980	280	1070	1010	900	1120	42	45	1090	1465	180	320	350	105	160	300	40	147	22	290	1905	815
D500-3	500	2110	280	1070	1010	900	1250	42	45	1090	1595	180	320	350	105	160	300	40	147	22	290	1905	815
D500-4	500	2260	280	1070	1010	900	1400	42	45	1090	1745	180	320	350	105	160	300	40	147	22	290	1905	815
D560-2	560	2040	315	1180	1120	1000	1120	48	50	1200	1505	200	300	350	130	180	300	45	165	25	260	2040	870
D560-3	560	2170	315	1180	1120	1000	1250	48	50	1200	1635	200	300	350	130	180	300	45	165	25	260	2040	870
D560-4	560	2320	315	1180	1120	1000	1400	48	50	1200	1785	200	300	350	130	180	300	45	165	25	260	2040	870
D560-5	560	2520	315	1180	1120	1000	1600	48	50	1200	1985	200	300	350	130	180	300	45	165	25	260	2040	870

Outline drawing and dimensions

2.Duct ventilation at both ends(IC37)

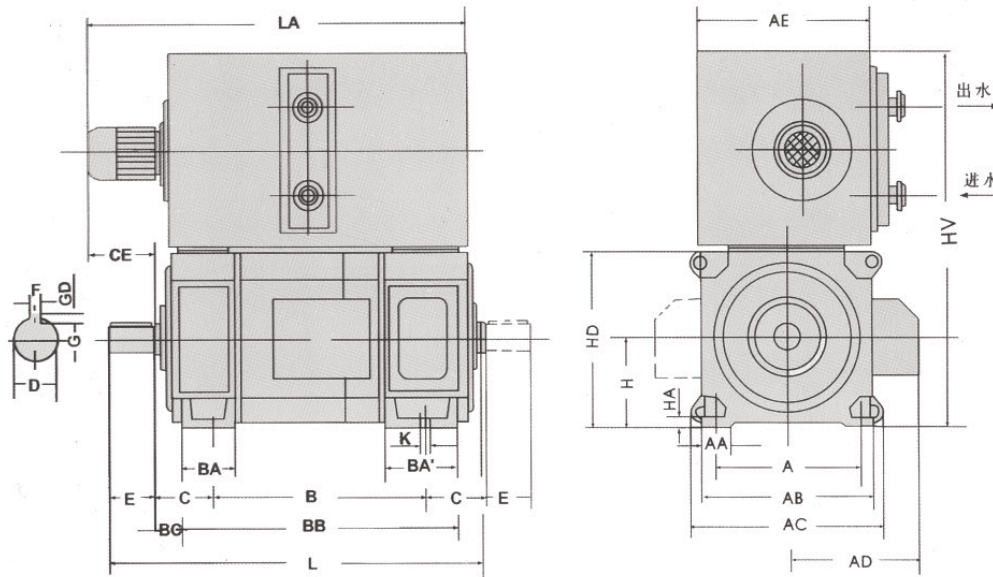
3.Duct ventilation at one ends(IC17)



Type	Main dimensions					Foot dimensions										Shaft extension dimension					Terminal box dimensions
	H*	L	C	AC	HD	A	B	K	HA	AB	BB	AA	BA	BA	BC	D*	E	F*	G	GD*	AD
D315-1	315	1372	216	720	635	508	770	28	25	620	985	115	230	280	124	90	170	25	81	14	490
D315-2	315	1452	216	720	635	508	850	28	25	620	1065	115	230	280	124	90	170	25	81	14	490
D315-3	315	1532	216	720	635	508	930	28	25	620	1145	115	230	280	124	90	170	25	81	14	490
D315-4	315	1632	216	720	635	508	1030	28	25	620	1245	115	230	280	124	90	170	25	81	14	490
D355-2	355	1515	254	800	720	610	800	28	35	700	1110	120	280	320	124	110	210	28	100	16	630
D355-3	355	1615	254	800	720	610	900	28	35	700	1210	120	280	320	124	110	210	28	100	16	630
D355-4	355	1715	254	800	720	610	1000	28	35	700	1310	120	280	320	124	110	210	28	100	16	630
D355-5	355	1835	254	800	720	610	1120	28	35	700	1430	120	280	320	124	110	210	28	100	16	630
D400-1	400	1560	280	906	810	686	800	35	30	790	1180	115	280	380	95	120	210	32	109	18	670
D400-2	400	1660	280	906	810	686	900	35	30	790	1280	115	280	380	95	120	210	32	109	18	670
D400-3	400	1760	280	906	810	686	1000	35	30	790	1380	115	280	380	95	120	210	32	109	18	670
D400-4	400	1880	280	906	810	686	1120	35	30	790	1500	115	280	380	95	120	210	32	109	18	670
D450-1	450	1775	315	1000	910	800	900	35	40	890	1334	120	340	360	93	140	250	36	128	20	725
D450-2	450	1875	315	1000	910	800	1000	35	40	890	1434	120	340	360	93	140	250	36	128	20	725
D450-3	450	1995	315	1000	910	800	1120	35	40	890	1554	120	340	360	93	140	250	36	128	20	725
D450-4	450	2125	315	1000	910	800	1150	35	40	890	1684	120	340	360	93	140	250	36	128	20	725
D500-1	500	1860	280	1070	1010	900	1000	42	45	1090	1345	180	320	350	105	160	300	40	147	22	815
D500-2	500	1980	280	1070	1010	900	1120	42	45	1090	1465	180	320	350	105	160	300	40	147	22	815
D500-3	500	2110	280	1070	1010	900	1250	42	45	1090	1595	180	320	350	105	160	300	40	147	22	815
D500-4	500	2260	280	1070	1010	900	1400	42	45	1090	1745	180	320	350	105	160	300	40	147	22	815
D560-2	560	2040	315	1180	1120	1000	1120	48	50	1200	1505	200	300	350	130	180	300	45	165	25	870
D560-3	560	2170	315	1180	1120	1000	1250	48	50	1200	1635	200	300	350	130	180	300	45	165	25	870
D560-4	560	2320	315	1180	1120	1000	1400	48	50	1200	1785	200	300	350	130	180	300	45	165	25	870
D560-5	560	2520	315	1180	1120	1000	1600	48	50	1200	1985	200	300	350	130	180	300	45	165	25	870

Outline drawing and dimensions

4. With top mounted cooler (ICW37A86)



Type	Main dimensions						Foot dimensions										Shaft extension dimension					terminal box di	Cooler dimensions		
	H*	L	C	AC	HD	LA	A	B	K	HA	AB	BB	AA	BA	BA	BC	D*	E	F*	G	GD*		AD	CE	HV
D315-1	315	1372	216	720	635	1427	508	770	28	25	620	985	115	230	280	124	90	170	25	81	14	490	280	1405	620
D315-2	315	1452	216	720	635	1507	508	850	28	25	620	1065	115	230	280	124	90	170	25	81	14	490	280	1405	620
D315-3	315	1532	216	720	635	1587	508	930	28	25	620	1145	115	230	280	124	90	170	25	81	14	490	280	1405	620
D315-4	315	1632	216	720	635	1687	508	1030	28	25	620	1245	115	230	280	124	90	170	25	81	14	490	280	1405	620
D355-2	355	1515	254	800	720	1647	610	800	28	35	700	1110	120	280	320	124	110	210	28	100	16	630	400	1670	700
D355-3	355	1615	254	800	720	1747	610	900	28	35	700	1210	120	280	320	124	110	210	28	100	16	630	400	1670	700
D355-4	355	1715	254	800	720	1847	610	1000	28	35	700	1310	120	280	320	124	110	210	28	100	16	630	400	1670	700
D355-5	355	1835	254	800	720	1967	610	1120	28	35	700	1430	120	280	320	124	110	210	28	100	16	630	400	1670	700
D400-1	400	1560	280	906	810	1722	686	800	35	30	790	1180	115	280	380	95	120	210	32	109	18	670	390	1820	790
D400-2	400	1660	280	906	810	1822	686	900	35	30	790	1280	115	280	380	95	120	210	32	109	18	670	390	1820	790
D400-3	400	1760	280	906	810	1922	686	1000	35	30	790	1380	115	280	380	95	120	210	32	109	18	670	390	1820	790
D400-4	400	1880	280	906	810	2042	686	1120	35	30	790	1500	115	280	380	95	120	210	32	109	18	670	390	1820	790
D450-1	450	1775	315	1000	910	1887	800	900	35	40	890	1334	120	340	360	93	140	250	36	128	20	725	380	1940	890
D450-2	450	1875	315	1000	910	1987	800	1000	35	40	890	1434	120	340	360	93	140	250	36	128	20	725	380	1940	890
D450-3	450	1995	315	1000	910	2107	800	1120	35	40	890	1554	120	340	360	93	140	250	36	128	20	725	380	1940	890
D450-4	450	2125	315	1000	910	2237	800	1250	35	40	890	1684	120	340	360	93	140	250	36	128	20	725	380	1940	890
D500-1	500	1860	280	1070	1010	1927	900	1000	42	45	1090	1345	180	320	350	105	160	300	40	147	22	815	390	2040	1090
D500-2	500	1980	280	1070	1010	2055	900	1120	42	45	1090	1465	180	320	350	105	160	300	40	147	22	815	390	2040	1090
D500-3	500	2110	280	1070	1010	2177	900	1250	42	45	1090	1595	180	320	350	105	160	300	40	147	22	815	390	2040	1090
D500-4	500	2260	280	1070	1010	2327	900	1400	42	45	1090	1745	180	320	350	105	160	300	40	147	22	815	390	2040	1090
D560-2	560	2040	315	1180	1120	2154	1000	1120	48	50	1200	1505	200	300	350	130	180	300	45	165	25	870	450	2190	1195
D560-3	560	2170	315	1180	1120	2284	1000	1250	48	50	1200	1635	200	300	350	130	180	300	45	165	25	870	450	2190	1195
D560-4	560	2320	315	1180	1120	2434	1000	1400	48	50	1200	1785	200	300	350	130	180	300	45	165	25	870	450	2190	1195
D560-5	560	2520	315	1180	1120	2634	1000	1600	48	50	1200	1985	200	300	350	130	180	300	45	165	25	870	450	2190	1195

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