

CAA3 SERIES

HIGH-PRESSURE AIR-AIR-COOLED MOTOR

POWER: 185-9000kW

Frame: H355-900



Basic technical requirements and characteristics of electric motors

- Protection class: Ip55;
- Cooling method: IC611 (IC616, IC666 can be derived);
- Installation method: B3(B35, V10 can be derived);
- Insulation class: F class, the temperature rise is assessed according to B class;
- Working system: S1;
- Voltage class: 6000V, 10000V; (customer-specified voltage can be derived);
- Frequency: 50Hz (60Hz can be derived, or specified frequency);
- Power range: 185-3150kW;
- Meet the standard Requirements for three-level energy efficiency in JB/T12730 (6kV) and JB/T12729 (10kV) .

The use environment of the motor

- The altitude does not exceed 1000m (the environment for use at the specified altitude can be derived);
- Ambient air temperature -20—+40°C;
- Ambient air humidity: the monthly average maximum relative humidity is 90%, and the monthly average temperature is not higher than 25°C;
- Environmental place: no flammable gas, no dust place .

Power supply for the motor

- Allowable voltage fluctuation ±5%, frequency fluctuation ±2%, combined voltage and frequency fluctuation ±5%.

The structure of the motor

- The motor adopts steel plate welding structure, which is beautiful and elegant;
- The motor is equipped with a non-stop oil injection and discharge device;
- Motor set bearing temperature measurement pt100; winding temperature measurement pt100 and other accessories;

Technical Data

Motor Type	Rated Power	Rated Speed	Efficiency	Power Factor	Current		Torque			Moment of inertia(J)	Approx WT
	kW	RPM	%		6KV	6.6KV	Full Load	Locked Rotor	Pull Out	Kg-m ²	Kg
CAA3-355F3-02P	220	2975	91.7	85	27.2	24.7	72	60	180	3.8	2190
CAA3-355F4-02P	250	2975	91.8	85	30.8	28.0	82	60	180	3.8	2250
CAA3-355F5-02P	280	2975	92.0	85	34.5	31.3	92	60	180	4.1	2320
CAA3-355F6-02P	315	2975	92.4	85	38.6	35.1	103	60	180	4.4	2460
CAA3-400F1-02P	355	2980	92.7	86	42.9	39.0	116	60	180	8.2	2800
CAA3-400F2-02P	400	2980	93.0	86	48.1	43.8	131	60	180	8.9	2900
CAA3-400F3-02P	450	2980	93.3	86	54.0	49.1	147	60	180	9.5	2990
CAA3-400F4-02P	500	2980	93.6	86	59.8	54.3	164	60	180	9.5	2990
CAA3-400F5-02P	560	2980	93.8	86	66.8	60.7	183	60	180	10.1	3110
CAA3-450F2-02P	630	2980	94.0	87	74.1	67.4	206	60	180	10.4	3340
CAA3-450F3-02P	710	2980	94.1	87	83.5	75.9	232	60	180	11.4	3500
CAA3-450F4-02P	800	2980	94.3	87	93.8	85.3	262	60	180	11.4	3500
CAA3-450F5-02P	900	2980	94.5	87	105.3	95.8	294	60	180	12.5	3690
CAA3-500F2-02P	1000	2980	94.6	87	116.9	106.3	327	60	180	17.6	4520
CAA3-500F3-02P	1120	2980	94.7	87	130.8	118.9	366	60	180	19.0	4690
CAA3-500F4-02P	1250	2980	94.9	87	145.7	132.4	409	60	180	20.4	4850
CAA3-500F5-02P	1400	2980	95.0	88	161.1	146.5	458	60	180	22.3	5060
CAA3-560F1-02P	1600	2980	95.1	88	184.0	167.2	523	60	180	37.9	6470
CAA3-560F2-02P	1800	2980	95.2	88	206.8	188.0	589	60	180	40.0	6680
CAA3-560F3-02P	2000	2982	95.4	88	229.2	208.4	654	60	180	42.1	6880
CAA3-630F2-02P	2240	2982	96.3	88	254.4	231.2	732	60	180	67.0	9040
CAA3-630F4-02P	2500	2982	95.5	88	286.3	260.2	817	60	180	72.0	9380
CAA3-630F6-02P	2800	2982	95.6	88	320.3	291.2	915	60	180	77.0	9720
CAA3-630F8-02P	3150	2982	95.7	88	359.9	327.2	1029	60	180	83.0	10190

Technlcal Data

Motor Type	Rated Power	Rated Speed	Efficiency	Power Factor	Current		Full Load	Torque Locked Rotor	Pull Out	Moment of inertia(J)	Approx WT
	kW	RPM	%		6kV	6.6kV		%FLT	%FLT		
CAA3-355F1-04P	185	1485	91.9	85	22.8	20.7	121	70	180	6.4	2290
CAA3-355F2-04P	200	1480	92.1	85	24.6	22.3	132	70	180	6.4	2290
CAA3-355F3-04P	220	1480	92.2	85	27.0	24.6	145	70	180	6.9	2370
CAA3-355F4-04P	250	1480	92.3	85	30.7	27.9	165	70	180	7.5	2450
CAA3-355F5-04P	280	1480	92.4	86	33.9	30.8	184	70	180	7.5	2450
CAA3-355F6-04P	315	1485	92.6	86	38.1	34.6	207	70	180	8.0	2530
CAA3-400F1-04P	355	1485	92.8	86	42.8	38.9	233	70	180	16.2	2800
CAA3-400F2-04P	400	1485	93.0	86	48.1	43.8	262	70	180	17.6	2930
CAA3-400F3-04P	450	1485	93.2	86	54.0	49.1	295	70	180	18.9	3020
CAA3-400F4-04P	500	1485	93.4	86	59.9	54.5	328	70	180	20.2	3120
CAA3-400F5-04P	560	1485	93.6	86	66.9	60.9	367	70	180	21.6	3250
CAA3-450F2-04P	630	1485	93.8	86	75.2	68.3	413	70	180	23.6	3580
CAA3-450F3-04P	710	1485	94.0	86	84.5	76.8	466	70	180	26.0	3770
CAA3-450F4-04P	800	1485	94.3	87	93.8	85.3	525	70	180	28.0	3930
CAA3-450F5-04P	900	1485	94.4	87	105.5	95.9	591	70	180	30.4	4120
CAA3-500F2-04P	1000	1485	94.5	87	117.0	106.4	656	70	180	56.9	5170
CAA3-500F3-04P	1120	1485	94.6	87	131.0	119.0	735	70	180	62.1	5400
CAA3-500F5-04P	1250	1485	94.8	88	144.2	131.1	820	70	180	66.7	5640
CAA3-500F6-04P	1400	1485	94.9	88	161.3	146.7	919	70	180	71.3	5880
CAA3-560F1-04P	1600	1485	95.0	88	184.2	167.4	1050	60	180	97.0	6800
CAA3-560F2-04P	1800	1485	95.1	88	207.0	188.2	1181	60	180	102.0	7000
CAA3-560F3-04P	2000	1485	95.3	88	229.5	208.6	1312	60	180	107.0	7210
CAA3-630F2-04P	2240	1485	95.4	88	256.8	233.4	1470	60	180	139.0	9010
CAA3-630F4-04P	2500	1485	95.5	88	286.3	260.2	1641	60	180	155.0	9580
CAA3-630F6-04P	2800	1485	95.6	88	320.3	291.2	1837	60	180	169.0	10020
CAA3-630F8-04P	3150	1485	95.8	88	359.6	326.9	2067	60	180	177.0	10270

Technlcal Data

Motor Type	Rated Power	Rated Speed	Efficiency	Power Factor	Current		Full Load	Torque Locked Rotor	Pull Out	Moment of inertia(J)	Approx WT
					6kV	6.6kV					
	kW	RPM	%		A	A	kg-m	%FLT	%FLT	Kg-m ²	Kg
CAA3-355F3-06P	185	985	91.5	82	23.7	21.6	183	70	180	9.4	2360
CAA3-355F4-06P	200	985	91.8	82	25.6	23.2	198	70	180	10.3	2440
CAA3-355F5-06P	220	990	92.0	82	28.1	25.5	217	70	180	11.2	2520
CAA3-355F6-06P	250	990	92.2	82	31.8	28.9	246	70	180	12.1	2600
CAA3-400F2-06P	280	990	92.5	82	35.5	32.3	276	70	180	22.4	2910
CAA3-400F3-06P	315	990	92.8	82	39.8	36.2	310	70	180	22.4	2910
CAA3-400F4-06P	355	985	93.0	83	44.3	40.2	351	70	180	24.2	3000
CAA3-400F5-06P	400	985	93.1	83	49.8	45.3	396	70	180	26.6	3130
CAA3-450F2-06P	450	985	93.4	83	55.9	50.8	445	70	180	30.2	3520
CAA3-450F3-06P	500	985	93.7	83	61.9	56.2	495	70	180	33.1	3680
CAA3-450F4-06P	560	990	93.8	84	68.4	62.2	551	70	180	36.4	3870
CAA3-450F5-06P	630	990	93.9	84	76.9	69.9	620	70	180	39.7	4060
CAA3-500F2-06P	710	990	94.2	84	86.3	78.5	699	70	180	58.7	4780
CAA3-500F3-06P	800	990	94.4	84	97.1	88.3	787	70	180	62.6	4930
CAA3-500F4-06P	900	990	94.5	85	107.8	98.0	886	70	180	67.9	5160
CAA3-500F5-06P	1000	990	94.6	85	119.7	108.8	984	70	180	74.0	5380
CAA3-560F1-06P	1120	990	94.7	85	133.9	121.7	1102	70	180	119.0	6340
CAA3-560F2-06P	1250	990	94.9	86	147.4	134.0	1230	70	180	125.0	6530
CAA3-560F3-06P	1400	990	95.0	86	164.9	149.9	1378	70	180	132.0	6710
CAA3-630F4-06P	1600	990	95.1	86	188.3	171.1	1575	70	180	152.0	8440
CAA3-630F5-06P	1800	990	95.2	86	211.6	192.3	1772	70	180	166.0	8800
CAA3-630F6-06P	2000	990	95.4	86	234.6	213.3	1969	70	180	179.0	9150
CAA3-630F8-06P	2240	990	95.5	86	262.5	238.6	2205	70	180	193.0	9510



Technlcal Data

Motor Type	Rated Power	Rated Speed	Efficiency	Power Factor	Current		Torque			Moment of inertia(J)	Approx WT
	10KV	11KV			Full Load	Locked Rotor	Pull Out				
	kW	RPM	%		A	A	kg·m	%FLT	%FLT	Kg·m ²	Kg
CAA3-400F0-04P	200	1485	91.3	83	15.2	13.9	131	70	180	16.2	2800
CAA3-400F1-04P	220	1485	91.4	83	16.7	15.2	144	70	180	16.2	2800
CAA3-400F2-04P	250	1485	91.6	83	19.0	17.3	164	70	180	17.6	2930
CAA3-400F3-04P	280	1485	91.8	83	21.2	19.3	184	70	180	18.9	3020
CAA3-400F4-04P	315	1485	92.1	83	23.8	21.6	207	70	180	18.9	3020
CAA3-400F5-04P	355	1485	92.3	86	25.8	23.5	233	70	180	20.2	3120
CAA3-400F6-04P	400	1485	92.5	86	29.0	26.4	262	70	180	21.6	3250
CAA3-450F1-04P	450	1485	92.9	86	32.5	29.6	295	70	180	21.9	3490
CAA3-450F2-04P	500	1485	93.0	86	36.1	32.8	328	70	180	23.6	3610
CAA3-450F3-04P	560	1485	93.3	86	40.3	36.6	367	70	180	26.0	3770
CAA3-450F4-04P	630	1485	93.5	86	45.2	41.1	413	70	180	28.0	3930
CAA3-450F5-04P	710	1485	94.1	86	50.7	46.1	466	70	180	30.4	4120
CAA3-500F3-04P	800	1485	94.3	87	56.3	51.2	525	70	180	53.6	5010
CAA3-500F4-04P	900	1485	94.4	87	63.3	57.5	591	70	180	56.9	5170
CAA3-500F5-04P	1000	1490	94.5	87	70.2	63.8	654	70	180	62.1	5400
CAA3-500F6-04P	1120	1490	94.6	87	78.6	71.4	733	70	180	66.7	5640
CAA3-560F2-04P	1250	1490	94.7	88	86.6	78.7	818	70	180	92.0	6590
CAA3-560F3-04P	1400	1490	95.0	88	96.7	87.9	916	70	180	97.0	6800
CAA3-560F4-04P	1600	1492	95.1	88	110.4	100.3	1045	60	180	102.0	7000
CAA3-560F5-04P	1800	1492	95.2	88	124.1	112.8	1176	60	180	107.0	7210
CAA3-630F1-04P	2000	1492	95.4	88	137.5	125.0	1306	60	180	154.0	9520
CAA3-630F3-04P	2240	1492	95.5	88	153.9	139.9	1463	60	180	161.0	9770
CAA3-630F5-04P	2500	1492	95.5	88	171.8	156.1	1633	60	180	169.0	10020

Technlcal Data

Motor Type	Rated Power	Rated Speed	Efficiency	Power Factor	Current		Torque			Moment of inertia(J)	Approx WT
	10KV	11KV			Full Load	Locked Rotor	Pull Out				
	kW	RPM	%		A	A	kg·m	%FLT	%FLT	Kg·m ²	Kg
CAA3-400F4-06P	220	980	91.2	80	17.4	15.8	219	70	180	24.2	2970
CAA3-400F5-06P	250	980	91.4	80	19.7	17.9	249	70	180	26.0	3070
CAA3-400F6-06P	280	980	91.7	80	22.0	20.0	278	70	180	27.9	3190
CAA3-450F1-06P	315	980	92.0	82	24.1	21.9	313	70	180	28.3	3420
CAA3-450F2-06P	355	980	92.2	83	26.8	24.3	353	70	180	30.2	3520
CAA3-450F3-06P	400	995	92.4	83	30.1	27.4	392	70	180	33.1	3680
CAA3-450F4-06P	450	995	92.6	83	33.8	30.7	441	70	180	36.4	3870
CAA3-450F5-06P	500	995	93.0	83	37.4	34.0	490	70	180	39.7	4060
CAA3-500F2-06P	560	995	93.3	84	41.3	37.5	548	70	180	58.7	4780
CAA3-500F3-06P	630	995	93.6	84	46.3	42.1	617	70	180	62.6	4930
CAA3-500F4-06P	710	995	93.8	84	52.0	47.3	695	70	180	67.9	5160
CAA3-500F5-06P	800	995	94.0	84	58.5	53.2	784	70	180	74.0	5380
CAA3-500F6-06P	900	995	94.2	85	64.9	59.0	881	70	180	80.2	5650
CAA3-560F2-06P	1000	995	94.4	85	72.0	65.4	979	70	180	109.0	6160
CAA3-560F3-06P	1120	995	94.6	85	80.4	73.1	1097	60	180	119.0	6340
CAA3-560F4-06P	1250	995	94.7	86	88.6	80.6	1224	60	180	132.0	6710
CAA3-560F5-06P	1400	995	95.1	86	98.8	89.8	1371	60	180	139.0	6890
CAA3-630F1-06P	1600	995	95.2	86	112.8	102.6	1567	60	180	175.0	9030
CAA3-630F2-06P	1800	995	95.3	86	126.8	115.3	1763	60	180	184.0	9270
CAA3-630F3-06P	2000	995	95.4	86	140.7	128.0	1959	60	180	197.0	9570
CAA3-630F5-06P	2240	995	95.4	86	157.6	143.3	2194	60	180	212.0	9980



Technlcal Data

Motor Type	Rated Power	Rated Speed	Efficiency	Power Factor	Current		Torque			Moment of inertia(J)	Approx WT
	kW	RPM	%		10KV A	11KV A	Full Load kg·m	Locked Rotor %FLT	Pull Out %FLT	Kg·m ²	Kg
CAA3-450F1-08P	200	745	91.0	75	16.9	15.4	262	70	180	28.4	3420
CAA3-450F2-08P	220	745	91.1	75	18.6	16.9	288	70	180	30.2	3520
CAA3-450F3-08P	250	745	91.3	75	21.1	19.2	327	70	180	33.0	3680
CAA3-450F4-08P	280	745	91.6	76	23.2	21.1	366	70	180	36.4	3870
CAA3-450F5-08P	315	745	92.0	77	25.7	23.3	412	70	180	39.7	4060
CAA3-500F1-08P	355	745	92.4	77	28.8	26.2	464	70	180	57.7	4420
CAA3-500F2-08P	400	745	92.5	78	32.0	29.1	523	70	180	64.4	4620
CAA3-500F3-08P	450	745	92.7	78	35.9	32.7	589	70	180	70.2	4820
CAA3-500F4-08P	500	745	93.1	79	39.3	35.7	654	70	180	77.0	5060
CAA3-500F5-08P	560	745	93.3	79	43.9	39.9	733	70	180	83.7	5310
CAA3-500F6-08P	630	745	93.8	82	47.3	43.0	824	70	180	91.4	5550
CAA3-560F2-08P	710	745	94.0	82	53.2	48.3	929	70	180	159.0	6530
CAA3-560F3-08P	800	742	94.2	82	59.8	54.4	1051	70	180	167.0	6710
CAA3-560F4-08P	900	742	94.3	82	67.2	61.1	1182	70	180	176.0	6890
CAA3-560F5-08P	1000	742	94.5	82	74.5	67.7	1313	70	180	184.0	7070
CAA3-630F1-08P	1120	742	94.7	83	82.3	74.8	1471	70	180	234.0	9100
CAA3-630F2-08P	1250	742	94.8	83	91.7	83.4	1642	70	180	245.0	9310
CAA3-630F3-08P	1400	742	94.9	83	102.6	93.3	1839	70	180	257.0	9520
CAA3-630F5-08P	1600	742	94.9	83	117.3	106.6	2101	70	180	268.0	9730

Technlcal Data

Motor Type	Rated Power	Rated Speed	Efficiency	Power Factor	Current		Torque			Moment of inertia(J)	Approx WT
	kW	RPM	%		10KV A	11KV A	Full Load kg·m	Locked Rotor %FLT	Pull Out %FLT	Kg·m ²	Kg
CAA3-450F4-10P	200	595	90.8	72	17.7	16.1	328	70	180	39.1	3740
CAA3-450F5-10P	220	595	91.0	72	19.4	17.6	360	70	180	41.8	3870
CAA3-500F1-10P	250	595	91.2	72	22.0	20.0	409	70	180	56.6	4630
CAA3-500F2-10P	280	595	91.5	74	23.9	21.7	459	70	180	61.6	4840
CAA3-500F3-10P	315	595	91.7	74	26.8	24.4	516	70	180	67.6	5080
CAA3-500F4-10P	355	595	92.1	75	29.7	27.0	581	70	180	73.5	5320
CAA3-500F5-10P	400	595	92.3	75	33.4	30.3	655	70	180	80.2	5570
CAA3-500F6-10P	450	595	92.5	76	37.0	33.6	737	70	180	86.9	5810
CAA3-560F1-10P	500	595	92.7	77	40.4	36.8	819	70	180	135.0	6200
CAA3-560F2-10P	560	595	92.9	78	44.6	40.6	917	70	180	143.0	6400
CAA3-560F3-10P	630	595	93.1	78	50.1	45.5	1032	70	180	160.0	6800
CAA3-560F4-10P	710	595	93.3	78	56.3	51.2	1163	70	180	168.0	6990
CAA3-560F5-10P	800	595	93.8	78	63.1	57.4	1310	70	180	176.0	7190
CAA3-630F1-10P	900	595	94.0	80	69.1	62.8	1474	70	180	213.0	8460
CAA3-630F2-10P	1000	595	94.1	80	76.7	69.7	1638	70	180	231.0	8780
CAA3-630F3-10P	1120	595	94.2	80	85.8	78.0	1834	70	180	250.0	9100
CAA3-630F4-10P	1250	595	94.2	80	95.8	87.1	2047	70	180	270.0	9410
CAA3-630F5-10P	1400	595	94.3	80	107.1	97.4	2293	70	180	287.0	9730



Technical Data

Motor Type	Rated Power	Rated Speed	Efficiency	Power Factor	Current		Torque			Moment of inertia(J)	Approx WT
	kW	RPM	%		10KV A	11KV A	Full Load kg·m	Locked Rotor %FLT	Pull Out %FLT	Kg·m ²	Kg
CAA3-500F2-12P	200	495	92.2	72	17.4	15.8	394	70	180	61.8	5030
CAA3-500F3-12P	220	495	92.4	72	19.1	17.4	433	70	180	64.6	5190
CAA3-500F4-12P	250	495	92.6	72	21.6	19.7	492	70	180	67.3	5360
CAA3-500F5-12P	280	495	92.8	72	24.2	22.0	551	70	180	70.1	5520
CAA3-500F6-12P	315	495	93.0	72	27.2	24.7	620	70	180	72.8	5680
CAA3-560F1-12P	355	495	93.2	72	30.5	27.8	699	70	180	148.0	6400
CAA3-560F2-12P	400	495	93.4	73	33.9	30.8	787	70	180	156.0	6600
CAA3-560F3-12P	450	495	93.5	73	38.1	34.6	886	70	180	164.0	6800
CAA3-560F4-12P	500	495	93.8	73	42.2	38.3	984	70	180	172.0	6990
CAA3-560F5-12P	560	495	94.1	74	46.4	42.2	1102	70	180	180.0	7190
CAA3-630F1-12P	630	495	94.3	74	52.1	47.4	1240	70	180	207.0	8250
CAA3-630F2-12P	710	495	94.5	74	58.6	53.3	1398	70	180	227.0	8570
CAA3-630F3-12P	800	495	94.8	74	65.8	59.9	1575	70	180	244.0	8880
CAA3-630F4-12P	900	495	94.8	74	74.1	67.3	1772	70	180	261.0	9200
CAA3-630F5-12P	1000	495	94.8	74	82.3	74.8	1969	70	180	281.0	9520

