



EBARA

Quality System
ISO 9001 : 2000
Lic no. QEC22090
Quality
Endorsed
Company

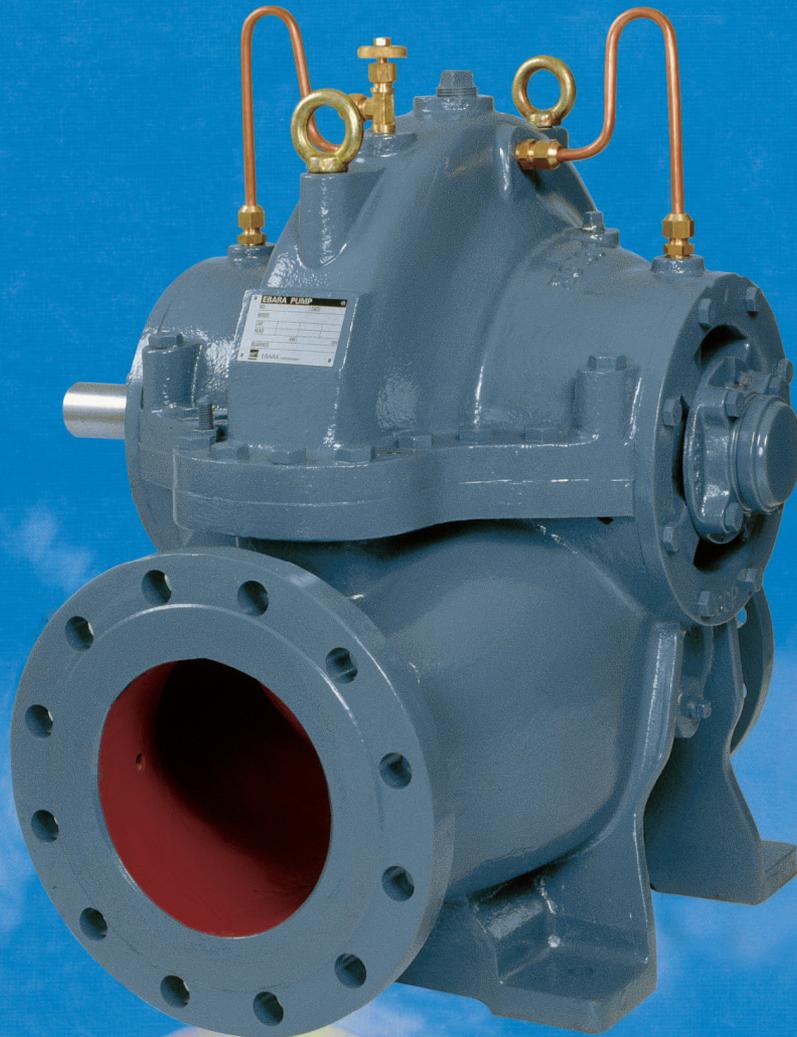


CN 8001-5N

HORIZONTAL SPLIT CASING PUMP

Model **CSA/CNA**

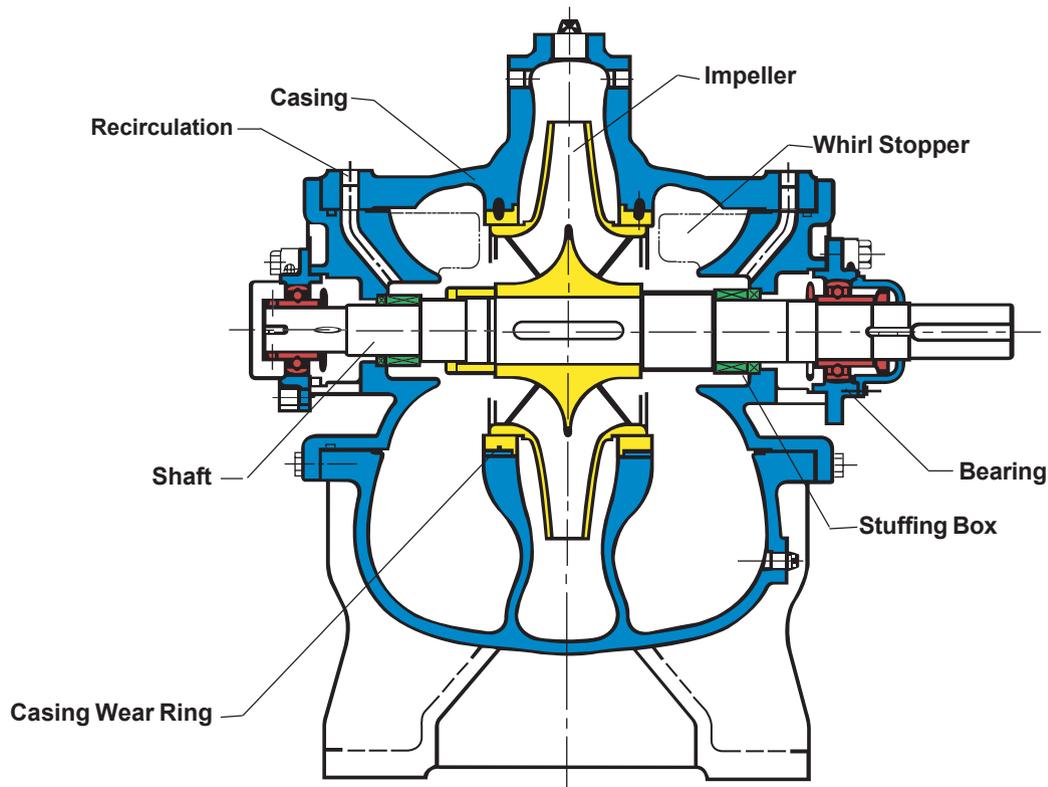
50Hz



HORIZONTAL SPLIT CASING PUMP

FEATURES

1. Very Compact design for ease of installation and permits minimum maintenance.
2. Axially split casing allows the easy removal of the top casing for inspection and service.
3. A wider range of performance with head up to 150m.
4. High speed drives and vertical mount available.
5. Anti-corrosion materials used on the rotating parts.
6. High quality sealed and cartridge type bearing units provide high durability.
7. High allowable working pressure can ensure stable running.
8. Mechanical seal for easy maintenance.



Casing

The rotating assembly can be removed without disturbing connected piping as the suction and discharge flanges are integrally casted into the lower casing half. Casing is **high pressure designed** and able to withstand against water surge.

Recirculation

Recirculation pipe lines for self-flushing are provided.

Impeller

The hydraulic matching of casing and impeller minimizes axial thrust and recirculation, ensuring **high efficiency, low NPSH required** and **quiet performance** over the entire range of operation. **Bronze material is standard.**

Whirl Stopper

The cast whirl stopper direct flow into the impeller eye for more even suction distribution. The gradually accelerated inlet flow has low tendency for velocity distortion, ensuring a **quiet operation.**

Shaft

316 stainless steel material ensures long life against corrosion and wear. Short support span of bearing lengthen bearing life.

Casing Wear Ring

Replaceable bronze casing wear rings are locked to prevent rotation. It protects the pump casing from wear, permits simple maintenance of proper running clearances to reduce maintenance costs and maintain high operating efficiency.

Bearing

Replenishable grease lubricated deep-groove bearing units with low friction loss has a **long life** can be easily inspected and replaceable. **Auto alignment structure** absorbs shaft deflection.

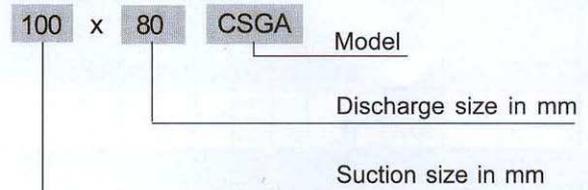
Stuffing Box

John Crane type mechanical seal is standard, easily obtainable in the market and replaceable without disturbing piping. Gland packing is available as option.

APPLICATIONS

1. Water supply.
2. Hot and cold water circulation.
3. Air conditioning.
4. Irrigation.
5. Industrial use.

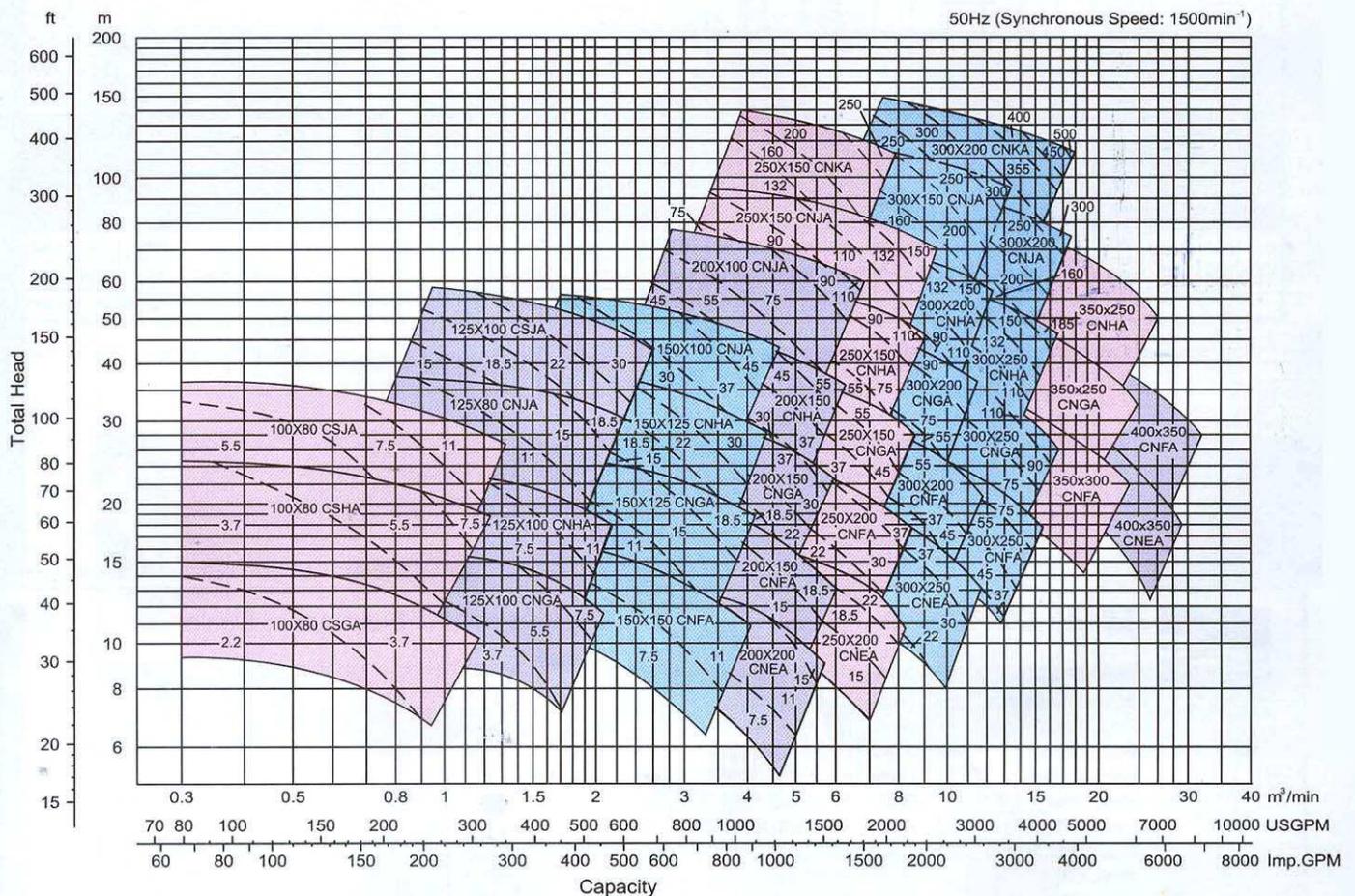
MODEL CODE



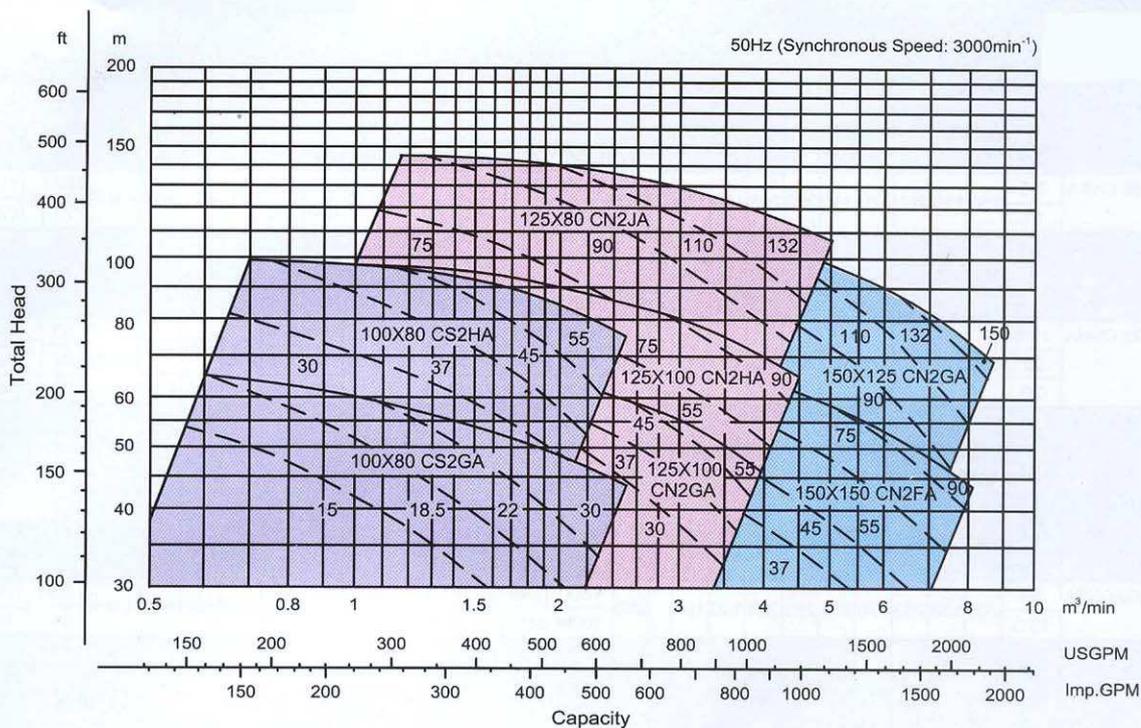
SPECIFICATION

Description		Standard		Option
Model		CSA,CNA		
Liquid Handled	Type of liquid	Clean Water, Industrial Water, River Water		
	Temperature	Below 80°C (176°F)		81°C-120°C (177°F-248°F) (only applicable for Mechanical Seal Models)
Max. Working Pressure		16 bar (16.3 kgf/cm ²)		
Construction	Shaft seal	Mechanical Seal	Gland Packing	Mechanical Seal
	Bearing	Ball Bearing		
	Lubrication	Grease		
Material	Casing	Cast Iron		Ductile Cast Iron (FCD)
	Impeller	Bronze (except 250x150 CNKA & 300x200 CNKA)		
		SCS 13 for 250x150 CNKA, 300x200 CNKA		
	Shaft	SUS 316	SUS 403	SUS 304
Flange	Shaft sleeve	Broze		Broze
	Suction	JIS 16 KRF		
	Discharge	JIS 16 KRF		
Accessories				
Standard		Air vent piping, M. seal or G. Packing, flushing water piping, Lift Bolts Drain piping (only applicable for G. Packing models)		
Option		Common base, Anchor bolts, Shaft coupling, Coupling guard		

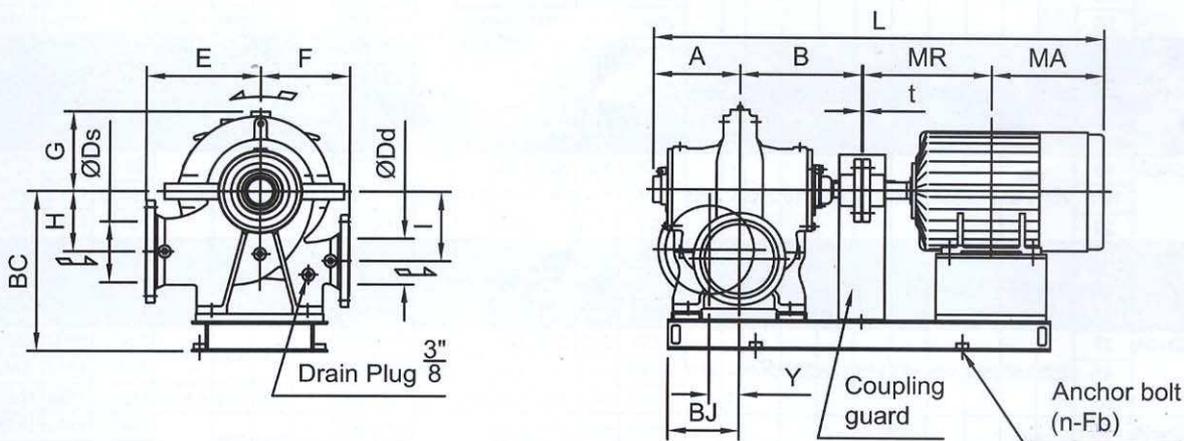
PERFORMANCE CHART



2 Poles



■ DIMENSION



Model	Motor kW	Size		Pump							Motor (TEFC)				Common Base							Total						
		Ds	Dd	A	B	E	F	G	H	I	Y	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L	wt kg
100x80 CSGA	2.2	100	80	221	250	270	240	169	140	140	70	143	100L	193	170	30	411	170	720	420	150	380	330	4-M12	37	3	837	210
	112M												200	182	42	730			430	856							222	
100x80 CSHA	3.7	100	80	221	250	280	220	185	150	160	70	165	112M	200	182	42	411	170	730	430	150	380	330	4-M12	37	3	856	244
	132S												239	207	65	770			470	920							268	
	132M												258	226	76	810			510	958							280	
100x80 CSJA	5.5	100	80	221	250	280	230	202	160	180	70	200	132S	239	207	65	411	170	770	470	150	380	330	4-M12	38	3	920	303
	132M												258	226	76	810			510	958							315	
	160M												323	281	120	890			590	1078							363	
125x100 CSJA	15	125	100	247	325	350	280	263	200	230	80	280	160L	345	303	158	491	235	1080	730	175	450	400	4-M16	79	3	1220	517
	180M												351.5	315.5	180	1080			730	1242							549	
	180L												370.5	334.5	205	1120			690	1280							577	
	200L												395.5	372.5	290	1160			730	1344							666	
125x100 CNGA	3.7	125	100	231	350	290	250	181	150	150	-	209	112M	200	182	42	411	170	830	530	150	380	330	4-M12	39	3	966	290
	132S												239	207	65	870			570	1030							314	
	132M												258	226	76	900			550	1068							330	
125x100 CNHA	7.5	125	100	231	350	300	250	195	150	160	-	242	132M	258	226	76	411	170	900	550	175	380	330	4-M12	45	3	1068	363
	160M												323	281	120	990			640	1188							418	

Model	Motor		Pump									Motor (TEFC)				Common Base								Total					
	kW	Ds	Dd	A	B	E	F	G	H	I	Y	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L		
125x80 CNJA	11												160M	323	281	120			1010	660						60		1188	430
	15	125	80	231	350	330	250	226	150	190	250		160L	345	303	158	411	190	1050	700	175	400	350	4-M16	62	3	1232	470	
	18.5												180M	351.5	315.5	180			1060	710						82		1251	512
150x150 CNFA	7.5	150	150	262	370	330	290	205	180	170	253		132M	258	226	76	471	210	970	620	175	450	400	4-M16	69	3	1119	398	
	11												160M	323	281	120			1050	700						73		1239	446
150x125 CNGA	11												160M	323	281	120			1070	640						77		1273	472
	15	150	125	271	395	330	260	224	190	190	275		160L	345	303	158	471	210	1120	690	215	450	400	4-M16	79	3	1317	512	
	18.5												180M	351.5	315.5	180			1130	700						86		1336	541
150x125 CNHA	18.5												180M	351.5	315.5	180			1100	670						85		1302	535
	22	150	125	262	370	350	280	243	190	210	270		180L	370.5	334.5	205	471	210	1140	710	215	450	400	4-M16	87	3	1340	562	
	30												200L	395.5	372.5	290			1180	750		500	450			95	4	1404	655
150x100 CNJA	30												200L	395.5	372.5	290			1230	800		450	400			98		1438	718
	37	150	100	271	395	380	290	269	190	240	330		225S	432	379	320	506	235	1260	830	215	500	450	4-M16	106	4	1481	756	
	45												225M	444.5	391.5	358			1290	860						108		1506	796
200x200 CNEA	7.5												132M	258	226	76			990	640	175					74		1120	420
	11	200	200	263	370	355	300	223	190	190	270		160M	323	281	120	491	235	1070	720		450	400	4-M16	78	3	1240	468	
	15												160L	345	303	158			1120	690	215					80		1284	508
200x150 CNFA	15	200	150	263	370	355	285	224	190	190	280		160L	345	303	158	491	235	1120	690	215	450	400	4-M16	80	3	1284	518	
	18.5												180M	351.5	315.5	180			1130	700						91	3	1303	551
200x150 CNGA	18.5												180M	351.5	315.5	180			1130	700						91		1303	581
	22	200	150	263	370	355	285	245	200	210	310		180L	370.5	334.5	205	491	235	1160	730	215	450	400	4-M16	93	3	1341	608	
	30												200L	395.5	372.5	290			1210	780		500	450			97	4	1405	697
	37												225S	432	379	320			1240	810						105	4	1448	735
200x150 CNHA	30												200L	395.5	372.5	290			1230	800		450	400			98		1449	743
	37	200	150	282	395	375	295	268	200	230	355		225S	432	379	320	506	235	1260	830	215	500	450	4-M16	106	4	1492	781	
	45												225M	444.5	391.5	358			1290	860						108		1517	821
	55												250S	463.5	409	520	531		1310	880		560	500	4-M20	143		1554	1018	
200x100 CNJA	45												225M	444.5	391.5	358	561		1370	940		500	450	4-M16	117		1595	920	
	55	200	100	305	450	420	335	309	200	270	445		250S	463.5	409	520			1390	960	215	560	500	4-M20	155	4	1632	1120	
	75												250M	482.5	428	580	586		1430	1000						159		1670	1184
	90												280S	544	463	700			1500	950	275	640	580			179		1766	1324
250x200 CNEA	15												160L	345	303	158			1170	740						90		1319	608
	18.5	250	200	273	395	395	315	243	210	210	360		180M	351.5	315.5	180	541	260	1180	750	215	500	450	4-M16	103	3	1338	643	
	22												180L	370.5	334.5	205			1210	780						107		1376	672
250x200 CNFA	22												180L	370.5	334.5	205			1210	780						107	3	1385	692
	30	250	200	282	395	395	315	247	210	210	380		200L	395.5	372.5	290	541	260	1260	830	215	500	450	4-M16	109	4	1449	779	
	37												225S	432	379	320			1290	860						114	4	1492	814
250x150 CNGA	37												225S	432	379	320	561		1290	860		500	450	4-M16	114		1492	849	
	45	250	150	282	395	395	315	276	220	240	415		225M	444.5	391.5	358	260		1310	880	215					115	4	1517	888
	55												250S	463.5	409	520	586		1330	900		560	500	4-M20	153		1554	1088	
250x150 CNHA	55												250S	463.5	409	520			1390	960						155		1642	1175
	75	250	150	315	450	430	325	299	220	260	500		250M	482.5	428	580	586	260	1430	1000		215	560	500	4-M20	159	4	1680	1239
	90												280S	544	463	700			1500	950	275	640	580			179		1776	1379
250x150 CNJA	75												250M	482.5	428	580			1520	970		580	520	4-M20	172		1765	1357	
	90												280S	544	463	700			1580	1030						184		1861	1489
	110	250	150	350	500	470	355	346	220	300	605		280M	569.5	488.5	800	636	295	1640	2x 645						188	4	1912	1592
	132												315S	589	517	1030			1650	2x 650	175	640	580	6-M20	215		1960	1850	
	160												315M	614.5	552.5	1030			1700	2x 675						220		2011	1855
250x150 CNKA	110												280M	569.5	488.5	800			1680	2x 665						192		1988	1832
	132												315S	589	517	920			1700	2x 675						220	4	2032	1980
	150	250	150	382	530	505	430	407	290	345	835		315M	614.5	552.5	1030	666	300	1750	2x 700						235		2083	2105
	185												315M	614.5	552.5	1070			1750	2x 700						235		2083	2140
	220												315AB	666	830	1450			1910	2x 740	215	700	640			270	5	2413	2555
300x250 CNEA	22												180L	370.5	334.5	205			1270	840						141		14	

Model	Motor		Pump									Motor (TEFC)				Common Base							Total					
	kW	Ds Dd	A	B	E	F	G	H	I	Y	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L	wt kg	
300x150 CNJA	150											315M	614.5	552.5	1030			1750	2x700	175	640	580	6-M20	235	4	2083	2050	
	185											315M	614.5	552.5	1070			1750	2x700				6-M20	235	4	2083	2090	
	220	300	150	382	530	520	405	384	250	335	785	315AB	666	830	1450	666	300	1910	2x740	215			6-M22	270	5	2413	2505	
	260											315CB	741	905	1660			2060	2x755	275	700	640	6-M22	280	5	2563	2725	
	300											315CB	741	905	1800			2060	2x755				6-M22	280	5	2563	2865	
300x250 CNFA	37											225S	432	379	320			1400	970			600	540	4-M20	160	4	1620	1050
	45	300	250	335	470	495	405	306	250	260	570	225M	444.5	391.5	358	636	295	1410	980	215			4-M20	162	4	1645	1090	
	55											250S	463.5	409	520			1440	1010			640	580	4-M20	167	4	1682	1257
	75											250M	482.5	428	580			1480	1050					4-M20	171	4	1720	1321
300x250 CNGA	75											250M	482.5	428	580			1520	970	275	580	520	4-M20	172	4	1775	1372	
	90	300	250	360	500	495	405	313	250	260	620	280S	544	463	700	636	295	1580	1030			640	580	4-M20	184	4	1871	1504
	110											280M	569.5	488.5	800			1640	2x645	175			6-M20	188	4	1922	1608	
300x250 CNHA	110											280M	569.5	488.5	800			1640	2x645				6-M20	189	4	1922	1804	
	132	300	250	360	500	495	405	337	275	295	815	315S	589	517	1030	661	295	1650	2x650	175	640	580	6-M20	216	4	1970	2061	
	160											315M	614.5	552.5	1030			1700	2x675				6-M20	221	4	2021	2066	
300x200 CNJA	150											315M	614.5	552.5	1030			1750	2x700	175	640	580	6-M20	192	4	1988	1827	
	185											315M	614.5	552.5	1070			1750	2x700				6-M20	220	4	2032	1975	
	220	300	200	382	530	525	415	379	275	320	860	315AB	660	830	1450	666	300	1910	2x740	215			6-M20	235	4	2083	2100	
	260											315CB	741	905	1660			2060	2x755	275	700	640	6-M20	235	4	2083	2140	
	300											315CB	741	905	1800			2060	2x755				6-M20	270	5	2413	2555	
300x200 CNKA	220											315AB	666	830	1450			2030	3x560	175		720	8-M22	300	4	2501	2820	
	260											315CB	741	905	1660	735		2180	3x610			790	8-M22	315	4	2651	3045	
	300	300	200	415	585	570	475	436	290	380	1070	315CB	741	905	1800			2180	3x610			710	8-M22	315	5	2651	3185	
	335											315DB	841	1005	1900	355		2380	3x650	215		710	8-M24	330	4	2851	3300	
	370											355AB	799	970	2150	785		2240	3x530			840	760	8-M24	320	4	2754	3540
	450											400CB	990	1135	2500			2620	3x690	275	900	820	8-M24	350	4	3130	3920	
350 x 300 CNFA	90											280S	544	463	700			1700	2x675				6-M22	250	4	1927	1750	
	110	350	300	386	530	560	450	345	310	310	800	280M	569.5	488.5	800	775		1750	2x700	175	790	720	6-M22	265	4	1978	1865	
	132											315S	589	517	1030	355		1770	2x710				6-M22	270	4	2026	2100	
350 x 250 CNGA	132											315S	589	517	920			1770	2x710	175			6-M22	270	4	2026	1980	
	150	350	250	386	530	560	450	350	310	303	790	315M	614.5	552.5	1030	775		1820	2x695	215	790	720	6-M22	285	4	2087	2105	
	185											315M	614.5	552.5	1070			1820	2x695				6-M22	285	4	2087	2145	
350 x 250 CNHA	185											315M	614.5	552.5	1070			1850	2x710	215			6-M22	290	4	2145	2205	
	220											315AB	666	830	1450			200	2x725	275			6-M22	315	4	2474	2610	
	260	350	250	414	560	560	440	373	315	330	845	315CB	741	905	1660	775	355	2150	3x600	175	790	720	8-M22	335	4	2624	2840	
	300											315CB	741	905	1800			2150	3x600				8-M22	335	5	2624	2980	
	335											315DB	841	1005	1900			2350	3x640	215			8-M22	350	4	2824	3095	
400 x 350 CNEA	90											280S	544	463	700			1810	2x730	175			6-M22	275	4	2062	2005	
	110	400	350	451	600	570	470	355	320	320	1030	280M	569.5	488.5	800	805	390	1860	2x715			790	720	6-M22	285	4	2113	2115
	132											315S	589	517	1030			1870	2x720	215			6-M22	285	4	2161	2345	
	150											315M	614.5	552.5	1030			1920	2x745				6-M22	295	4	2222	2355	
400 x 350 CNFA	150											315M	614.5	552.5	1030			1910	2x740	215			6-M22	295	4	2195	2360	
	185	400	350	439	585	625	510	385	305	344	1035	315M	614.5	552.5	1070	805	390	1910	2x740			790	720	6-M22	295	4	2195	2400
	220											315AB	666	830	1450			2050	2x750	275			6-M22	315	5	2524	2800	

* Common Base weight includes the shaft coupling and coupling guard.

Unit: mm, unless otherwise stated

All specification subject to change without prior notice.

	EBARA CORPORATION		Distributor / Dealer	
	Head Office, Tokyo International Division, Tokyo Singapore Office Beijing Office Bangkok Office Hanoi Office Jakarta Office Kuala Lumpur Office Manila Office Taipei Office Dubai Office	Phone : 81 - 3 - 3743 - 6111 Phone : 81 - 3 - 5461 - 6111 Phone : 65 - 862 - 3536 Phone : 86 - 10 - 6590 - 8150 Phone : 66 - 2 - 216 - 4935 Phone : 84 - 4 - 826 - 3601 Phone : 62 - 21 - 8740852 Phone : 603 - 5569 - 1655 Phone : 63 - 2 - 816 - 7524 Phone : 886 - 2 - 567 - 1310 Phone : 971 - 4 - 883 - 8889	Phone : 81 - 3 - 3743 - 6111 Phone : 81 - 3 - 5461 - 6111 Phone : 65 - 862 - 3536 Phone : 86 - 10 - 6590 - 8150 Phone : 66 - 2 - 216 - 4935 Phone : 84 - 4 - 826 - 3617 Phone : 62 - 21 - 8740033 Phone : 603 - 5569 - 3766 Phone : 63 - 2 - 817 - 6662 Phone : 886 - 2 - 567 - 1046 Phone : 971 - 4 - 883 - 5307	Fax : 65 - 861 - 0589 Fax : 86 - 10 - 6590 - 8158 Fax : 66 - 2 - 216 - 4937 Fax : 84 - 4 - 826 - 3617 Fax : 62 - 21 - 8740033 Fax : 603 - 5569 - 3766 Fax : 63 - 2 - 817 - 6662 Fax : 886 - 2 - 567 - 1046 Fax : 971 - 4 - 883 - 5307