HORIZONTAL SPLIT CASING PUMPS

APPLICATIONS

- Water supply
- Hot and cold water circulation
- For cooling tower
- Irrigation
- Industrial use
- Drainage
- Sprinkling
- Air-conditioning
- For swimming pool

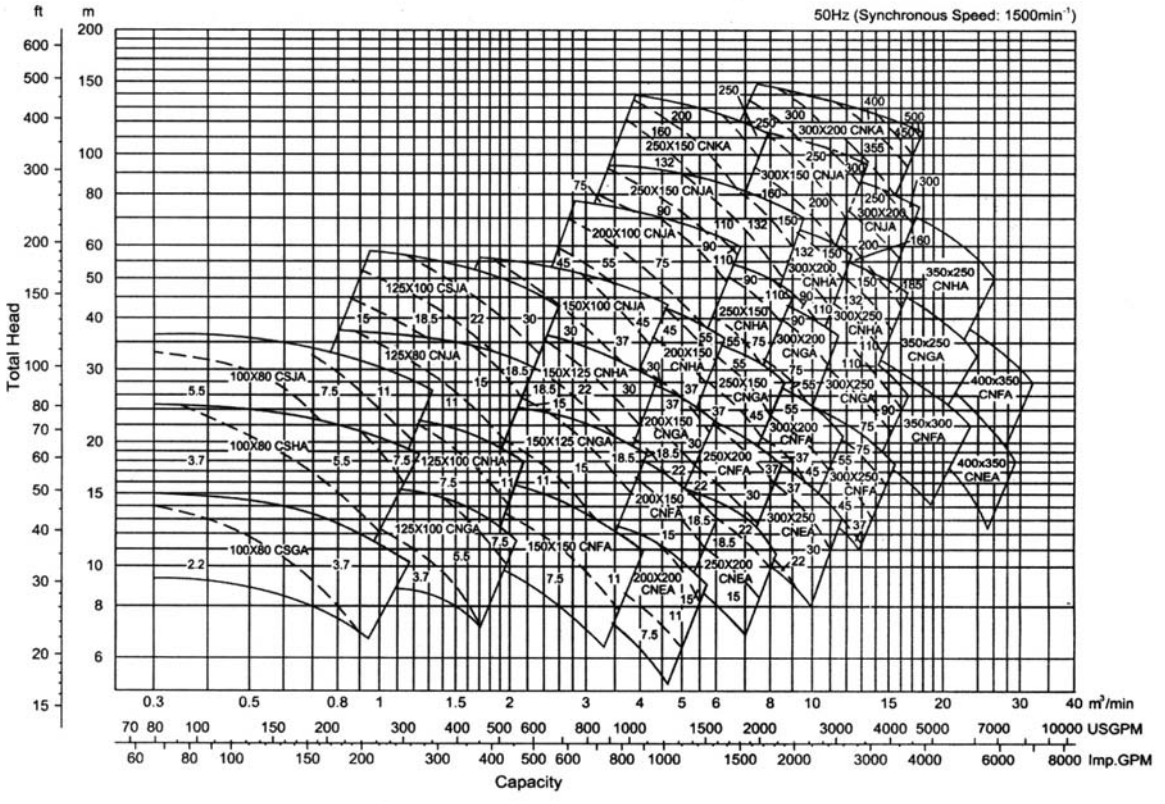
FEATURES

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

SPECIFICATIONS

Description		Standard	Optional	
Model		CSA/CNA		
Liquid handled	Type of liquid	Clean water, industrial water, river water		
	Temperatures	Below 80°C (176°F)	81°C-120°C (177°F~248°F) (only applicable for Mechanical Seal Models)	
Max. Working Pressure		16 bar (16.3kgf/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 300 x 200 CNKA)	SCS 13, SCS 14	
		SCS 13 for 300 x 200 CNKA		
	Shaft	SUS 316	SUS 403	SUS304
	Shaft Sleeve		Bronze	Bronze
Flange	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 - 4 POLES



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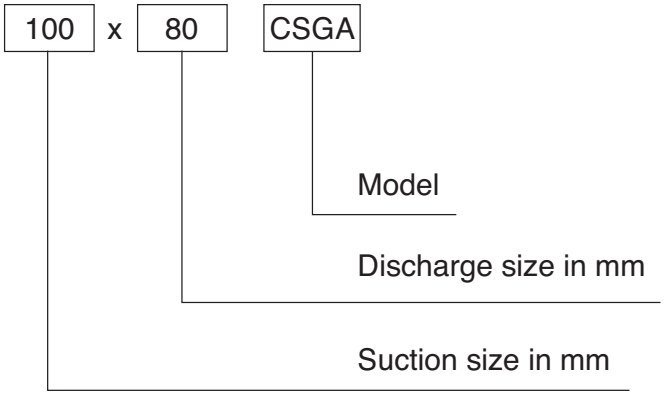
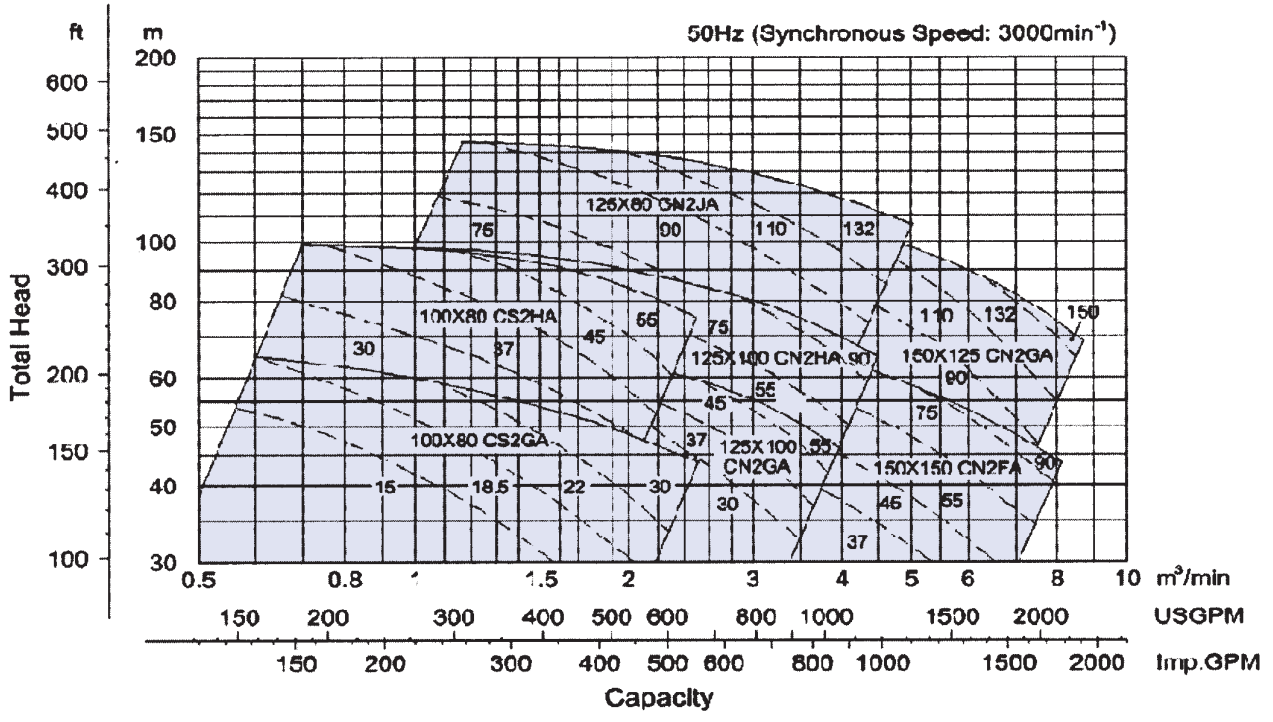


PERFORMANCE CHART - 2 POLES



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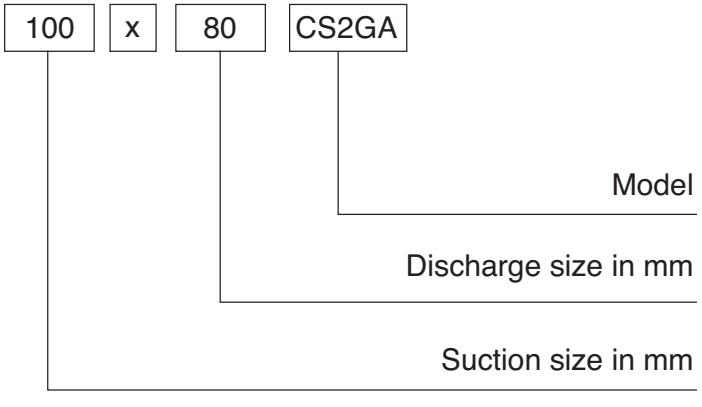


TECHNICAL DATA - Allowable Pressure and Material

Model	Allowable Pressure for Casing					Material		
	Hydro Test Press	Max. Working Pressure		Max. Suction Pressure		Casing	Impeller	Shaft
	kg	kg	psi	kg	psi		Standard	Standard
100 X 80 CSGA	24	16	230	10	143	Cast Iron	Bronze	Stainless Steel
100 X 80 CSHA								
100 X 80 CSJA								
125 X 100 CSJA	24	16	230	10	143	Cast Iron	Bronze	Stainless Steel
125 X 100 CNGA								
125 X 100 CNHA								
125 X 80 CNJA								
150 X 150 CNFA	24	16	230	10	143	Cast Iron	Bronze	Stainless Steel
150 X 150 CNGA								
150 X 125 CNHA								
150 X 100 CNJA								
200 X 200 CNEA	24	16	230	10	143	Cast Iron	Bronze	Stainless Steel
200 X 150 CNFA								
200 X 150 CNGA								
200 X 150 CNHA								
200 X 100 CNJA								
250 X 200 CNEA	24	16	230	10	143	Cast Iron	Bronze	Stainless Steel
250 X 200 CNFA								
250 X 150 CNGA								
250 X 150 CNHA								
250 X 150 CNJA								
250 X 150 CNKA								
300 X 250 CNEA	24	16	230	10	143	Cast Iron	Bronze	Stainless Steel
300 X 250 CNFA								
300 X 200 CNGA								
300 X 200 CNHA								
300 X 150 CNJA								
300 X 250 CNFA								
300 X 250 CNGA								
300 X 250 CNHA								
300 X 200 CNJA								
300 X 200 CNKA							Stainless Steel	
350 X 300 CNFA	24	16	230	10	143	Cast Iron	Bronze	Stainless Steel
350 X 250 CNGA								
350 X 250 CNHA								
400 X 350 CNEA	24	16	230	10	143	Cast Iron	Bronze	Stainless Steel
400 X 350 CNFA								

TECHNICAL DATA - Allowable Maximum Speed

Model	Allowable Speed	min^{-1} (rpm)
	Standard Speed	Optional Speed
100 X 80 CSGA	3000	-
100 X 80 CSHA		
100 X 80CSJA	1500	*2000
125 X 100 CSJA		
125 X 100 CNGA	3000	-
125 X 100 CNHA		
125 X 80 CNJA	1500	*3000
150 X 150 CNFA	3000	-
150 X 150 CNGA		
150 X 125 CNHA	1500	*2000
150 X 100 CNJA		*2000
200 X 200 CNEA	1500	*2000
200 X 150 CNFA		-
200 X 150 CNGA		
200 X 150 CNHA		*2000
200 X 100 CNJA		
250 X 200 CNEA	1500	-
250 X 200 CNFA		*2000
250 X 150 CNGA		-
250 X 150 CNHA		
250 X 150 CNJA		
250 X 150 CNKA		
300 X 250 CNEA	1500	-
300 X 250 CNFA		
300 X 200 CNGA		
300 X 200 CNHA		
300 X 150 CNJA		
300 X 250 CNFA		
300 X 250 CNGA		
300 X 250 CNHA		
300 X 200 CNJA		
300 X 200 CNKA		
350 X 300 CNFA	1500	-
350 X 250 CNGA		
350 X 250 CNHA		
400 X 350 CNEA	1500	-
400 X 350 CNFA		

Remark :

1. Standard Speed
   Pump can be operated and runs continuously.

2. Optional Speed
   Limit application which will be used for temporary operations such as fire fighting or emergency stand by application through diesel engine driven.

*This speed is available for “Gland packing version” only.
As for mechanical seal, it should be 1500 min^{-1} (r.p.m.) and below.

TECHNICAL DATA - Gland Packing 50Hz

Model	Driver (CP) Side						Driver (CP) Side					
	Stuffing Box Data				Gland Packing		Stuffing Box Data				Gland Packing	
	Sleeve Size (mm)	Inner Dia. (mm)	Depth (mm)	Lantern Ring Width (mm)	Size (mm)	Qty	Sleeve Size (mm)	Inner Dia. (mm)	Depth (mm)	Lantern Ring Width (mm)	Size (mm)	Qty
100 X 80 CSGA	45	65	71	15	45x65x10	5	45	65	71	15	45x65x10	5
100 X 80 CSHA												
100 X 80 CSJA												
125 X 100 CSJA	55	75	72		55x75x10							
125 X 100 CNGA	55	75	72	15	55x75x10	5	55	75	72	15	55x75x10	5
125 X 100 CNHA												
125 X 80 CNJA												
150 X 150 CNFA	55	75	72	15	55x75x10	5	55	75	72	15	55x75x10	5
150 X 150 CNGA	70	95	90	18	70x95x12.5		70	95	90	18	70x95x12.5	
150 X 125 CNHA	55	75	72	15	55x75x10		55	75	72	15	55x75x10	
150 X 100 CNJA	70	95	90	18	70x95x12.5		70	95	90	18	70x95x12.5	
200 X 200 CNEA	55	75	72	15	55x75x10	5	55	75	72	15	55x75x10	5
200 X 150 CNFA												
200 X 150 CNGA												
200 X 150 CNHA	70	95	90	18	70x95x12.5							
200 X 100 CNJA	80	109	103	20	80x109x14.5		70	95	90	18	70x95x12.5	
250 X 200 CNEA	55	75	72	15	55x75x10	5	45	65	71	15	45x65x10	5
250 X 200 CNFA	70	95	90	18	70x95x12.5		55	75	72		55x75x10	
250 X 150 CNGA												
250 X 150 CNHA	80	109	103	20	80x109x14.5		70	95	90	18	70x95x12.5	
250 X 150 CNJA	90	119			90x119x14.5		80	109	103	20	80x109x14.5	
250 X 150 CNKA	100	129			100x129x14.5		90	119			90x119x14.5	
300 X 250 CNEA	70	95	90	18	70x95x12.5	5	55	75	72	15	55x75x10	5
300 X 200 CNFA	80	109	103	20	80x109x14.5		70	95	90	18	70x95x12.5	
300 X 200 CNGA												
300 X 200 CNHA	90	119			90x119x14.5		80	109	103	20	80x109x14.5	
300 X 150 CNJA	100	129			100x129x14.5		90	119			90x119x14.5	
300 X 250 CNFA	80	109			80x109x14.5		70	95	90		70x95x12.5	
300 X 250 CNGA	90	119			90x119x14.5		80	109	103		80x109x14.5	
300 X 250 CNHA												
300 X 200 CNJA	100	129			100x129x14.5		90	109			90x119x14.5	
300 X 200 CNKA	100	139		22	110x139x14.5		100	129			100x129x14.5	
350 X 300 CNFA	90	119	103	20	90x119x14.5	5	80	109	103	20	80x109x14.5	5
350 X 250 CNGA												
350 X 250 CNHA	100	129			100x129x14.5		90	119			90x119x14.5	
400 X 350 CNEA	90	119			90x119x14.5	5	80	109			80x109x14.5	5
400 X 350 CNFA	100	129			100x129x14.5		90	119			90x119x14.5	

TECHNICAL DATA - Impeller 50Hz

Model	Impeller							
	Impeller Dia		Casing Ring		Total Eye Area	✣	No. of Vanes	Weight Approx.
	Max (mm)	Min (mm)	Dia. (mm)	Clearance (mm)	(cm^2)	(kg m^2)		kg
100 X 80 CSGA	218	175	124	0.240 - 0.344	73.7	0.4	5	4.2
100 X 80 CSHA	266	214	132	0.260 - 0.383	79.7	0.7		6.3
100 X 80 CSJA	326	266	136		82.7	1.3		13
125 X 100 CSJA	410	335	168	0.310 - 0.433	147.5	2.5		21
125 X 80 CNJA	327	264	144/140	0.280 - 0.403	179.3	1.3	5	14
125 X 100 CNGA	218	178	136/132	0.260 - 0.383	154	0.4		10
125 X 100 CNHA	265	210			166.8	0.7		12
150 X 150 CNFA	227	194	152/148	0.280 - 0.403	226.9	0.5	5	14
150 X 125 CNGA	274	227	162/158	0.310 - 0.433	244.4	0.8		16.5
150 X 125 CNHA	333	274	172/168		283.4	1.4		20
150 X 100 CNJA	397	327			264.4	2.3		24
200 X 200 CNEA	218	183	168	0.310 - 0.437	263.4	0.6	5	9.7
200 X 150 CNFA	254	218			284.2	0.8		13.3
200 X 150 CNGA	307	254	188	0.340 - 0.482	306.8	1		15.4
200 X 150 CNHA	373	307			331.4	2.9		20.2
200 X 100 CNJA	461	373	200		356.6	3.6		32
250 X 200 CNEA	244	205	188	0.340 - 0.482	349.4	0.7	5	12.2
250 X 200 CNFA	285	244	200		357.6	1.3		16.8
250 X 150 CNGA	344	285			386	1.9		21.1
250 X 150 CNHA	418	344	212	0.380 - 0.522	417.2	3.3		24.4
250 X 150 CNJA	517	418	224		448.8	6.2		40
250 X 150 CNKA	638	517	236	0.570 - 0.672	479.6	10.3		76
300 X 250 CNEA	274	230	200	0.340 - 0.482	417.6	1.3	5	17.2
300 X 200 CNFA	320	274	212	0.380 - 0.522	449.8	2.4		23.3
300 X 200 CNGA	386	320	224		485.6	4.2		29
300 X 200 CNHA	469	386	236	0.420 - 0.562	524.8	5.4		36.6
300 X 150 CNJA	580	469	250		565.4	8.2		65
300 X 250 CNFA	308	258	224	0.380 - 0.522	526	2.4		23.8
300 X 250 CNGA	359	308	236	0.420 - 0.562	567	3.9		31.9
300 X 250 CNHA	433	359	250		611.2	5.6		36
300 X 200 CNJA	526	433	264	0.480 - 0.641	720.6	7.7		52.5
300 X 200 CNKA	651	527	278	0.590 - 0.731	711.6	13.2		80
350 X 300 CNFA	345	290	250	0.420 - 0.562	664	4.1	5	40.4
350 X 250 CNGA	403	345	267	0.300 - 0.518	715.2	7.6		41
350 X 250 CNHA	486	437	280	0.480 - 0.641	772.1	13.3		49.8
400 X 350 CNEA	325	285	264	0.480 - 0.641	812	5.4	5	51
400 X 350 CNFA	388	325	280		836.3	7.6		50

✣ Including GD^2 of coupling

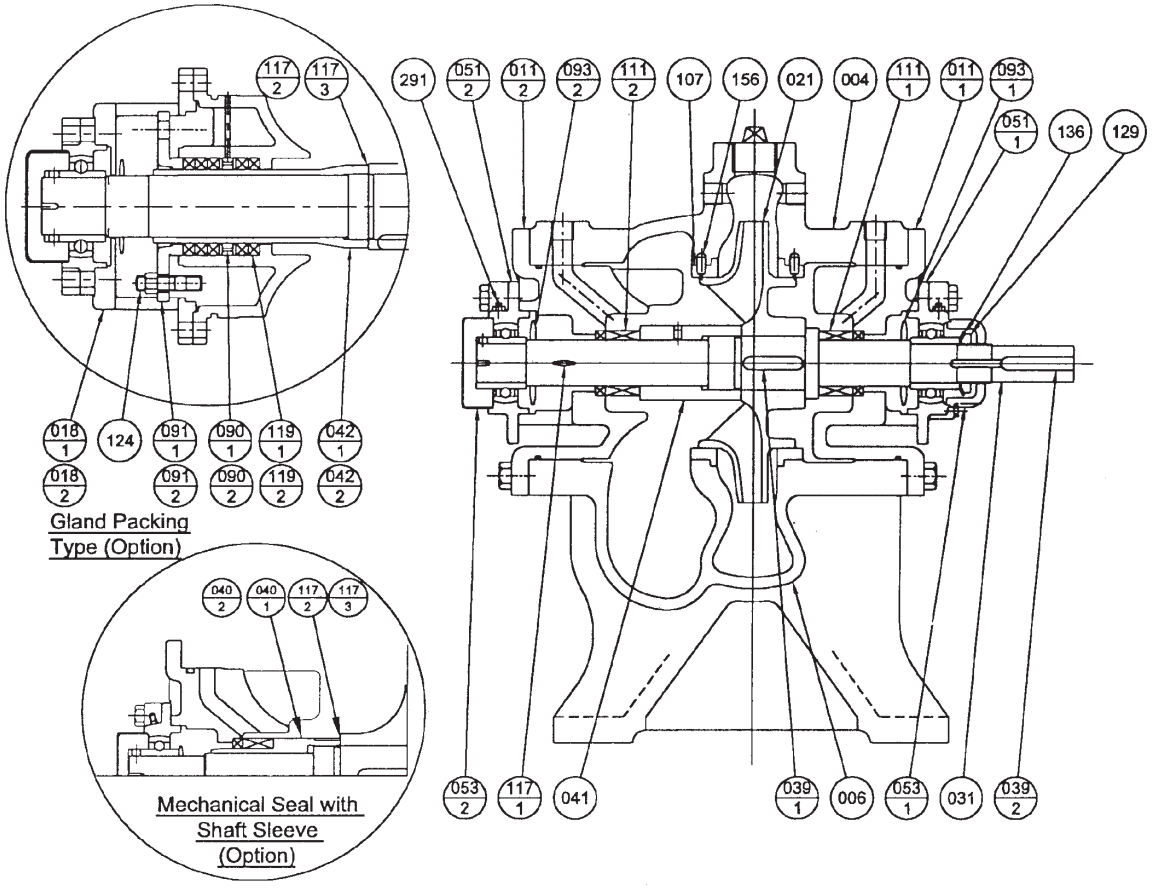
✣ Do not apply GD^2 when making water hammer analysis

TECHNICAL DATA - Bearing and Shaft 50Hz

Model	Bearing		✣ Grease Replenishment		Shaft Data			
	Drive (CP) Side	Opposite CCP) Side	CP Side (gr)	CCP Side (gr)	Approx. Wt. (kg)	Max. HP Per 1000rpm (HP)	Shaft Dia. Coupling (mm)	Shaft Dia. Impeller (mm)
100 X 80 CSGA	CUCFC 206C	UCFC 206E	2.2	2.2	3.4	11	28	42
100 X 80 CSHA								
100 X 80 CSJA								
125 X 100 CSJA	CUCFC 208C				6.2	27	38	50
125 X 100 CNGA	CUCFC 208C	UCFC 206E	3.9	2.2	6.4	11	28	42
125 X 100 CNHA					6.4	27	38	50
125 X 80 CNJA					6.4			
50 X 150 CNFA	CUCFC 208C	UCFC 206E	3.9	2.2	7.6	27	38	50
150 X 125 CNGA	CUCFC 210C	UCFC 208E	5.4	3.9	11.6	55	48	60
150 X 125 CNHA	CUCFC 208C	UCFC 206E	3.9	2.2	7.6	27	38	50
150 X 100 CNJA	CUCFC 210C	UCFC 208E	5.4	3.9	11.6	55	48	60
200 X 200 CNEA	CUCFC 208C	UCFC 206E	3.9	2.2	7.6	27	38	50
200 X 150 CNFA								
200 X 150 CNGA								
200 X 150 CNHA	CUCFC 210C	UCFC 208E	5.4	3.9	12	58	48	60
200 X 100 CNJA	CUCFC 212C	UCFC 210E	10	5.4	18.3	83	55	70
250 X 200 CNEA	CUCFC 208C	UCFC 206E	3.9	2.2	8.1	27	38	50
250 X 200 CNFA	CUCFC 210C	UCFC 208E	5.4	3.9	12	55	48	60
250 X 150 CNGA								
250 X 150 CNHA	CUCFC 212C	UCFC 210E	10	5.4	18.8	83	55	70
250 X 150 CNJA	CUCFC 214C	UCFC 212E	13.6	10	27.3	13..6	65	80
250 X 150 CNKA	CUCFC 216C	UCFC 214E	19.2	13.6	38	209	75	90
300 X 250 CNEA	CUCFC 210C	UCFC 208E	5.4	3.9	12.9	55	48	60
300 X 200 CNFA	CUCFC 212C	UCFC 210E	10	5.4	18.8	83	55	70
300 X 200 CNGA					19.1			
300 X 200 CNHA	CUCFC 214C	UCFC 212E	13.6	10	27.3	136	65	80
300 X 150 CNJA	CUCFC 216C	UCFC 214E	19.2	13.6	38	209	75	90
300 X 250 CNFA	CUCFC 212C	UCFC 210E	10	5.4	20.1	83	55	70
300 X 250 CNGA	CUCFC 214C	UCFC 212E	13.6	10	27.9	136	65	80
300 X 250 CNHA								
300 X 200 CNJA	CUCFC 216C	UCFC 214CE	19.2	13.6	38	209	75	90
300 X 200 CNKA	CUCFC 218C	UCFC 216CE	25.5	19.2	55	304	85	100
350 X 300 CNFA	CUCFC 214C	UCFC 212E	13.6	10	30.6	136	65	80
350 X 250 CNGA	CUCFC 214C	UCFC 212E	13.6	10	30.6	136	65	80
350 X 250 CNHA	CUCFC 216C	UCFC 214E	19.2	13.6	40.2	209	75	90
400 X 350 CNEA	CUCFC 214C	UCFC 212E	13.6	10	45	136	65	80
400 X 350 CNFA	CUCFC 216C	UCFC 214CE	19.2	13.6	48	209	75	90

✣ Replenishment: Continuous operation 4300 hours.

SECTIONAL VIEW - CSA 50Hz



Mechanical Seal Type (Standard)

No.	Part Name	Material	Qty
004	Casing Upper Half	FC250	1
006	Casing Lower Half		
011-1	Side Cover		
011-2	Side Cover		
021	Impeller	BC6	
031	Shaft	316 Stainless Steel	
039-1	Impeller Key		
039-2	Coupling Key	S50C	
041	Impeller Nut	BC6	
051-1	Bearing Unit	FC200	
051-2	Bearing Unit		

No.	Part Name	Material	Qty
053-1	Bearing Cover	FC200	1
053-2	Bearing Cover		
093-1	Deflector (CP Side)	Rubber	
093-2	Deflector (CCP Side)		
107	Casing Water Ring	BC6	2
111-1	Mechanical Seal	-	1
111-2	Mechanical Seal	-	
117-1	Gasket (Casing)	V#6500	
129	Bearing Nut	SS400	
136	Bearing Washer		
156	Lock Pin	SUS304	2
291	Grease Nipple	C3604BD-F	

Mechanical Seal with Shaft Sleeve Type (Option)

No.	Part Name	Material	Qty
040-1	Shaft Sleeve (CP Side)	BC6	1
040-2	Shaft Sleeve (CCP Side)	BC6	

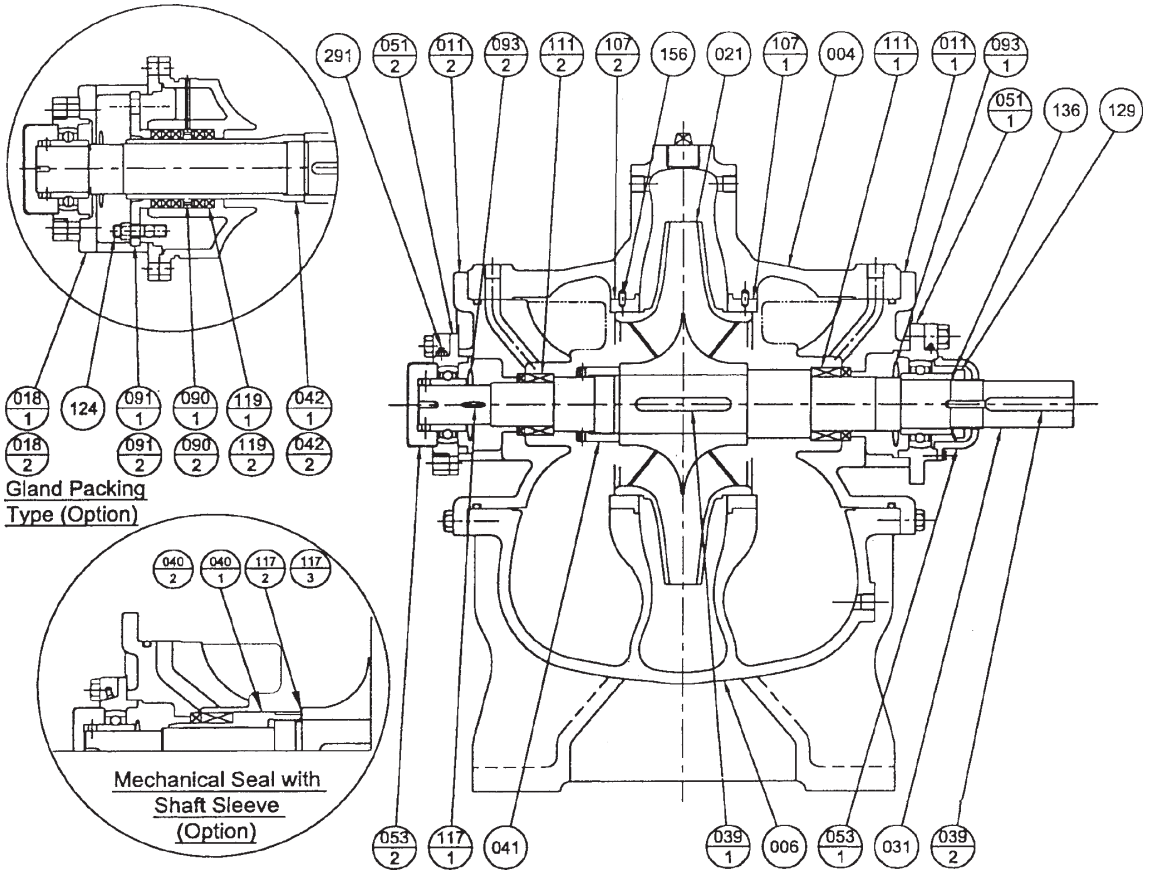
No.	Part Name	Material	Qty
117-2	Sleeve Gasket (CP Side)	V#6500	1
117-3	Sleeve Gasket (CCP Side)	v#6500	

Gland Packing Type (Optional)

No.	Part Name	Material	Qty
124	Gland Bolt	C3604BD-F	4
018-1	Bearing Support (CP Side)	FC200	1
018-2	Bearing Support (CCP Side)		
042-1	Shaft Sleeve (CP Side)	BC6	1
042-2	Shaft Sleeve (CCP Side)		

No.	Part Name	Material	Qty
091-1	Gland (CP Side)	BC6	1
091-2	Gland (CCP Side)		
090-1	Lantern Ring (CP Side)		
090-2	Lantern Ring (CCP Side)		
119-1	Gland Packing (CP Side)	Carbonised Fiber	5
119-2	Gland Packing (CCP Side)	Carbonised Fiber	5

SECTIONAL VIEW - CNA 50Hz



Mechanical Seal Type (Standard)

No.	Part Name	Material	Qty
004	Casing Upper Half	FC250	1
006	Casing Lower Half		
011-1	Side Cover		
011-2	Side Cover		
021	Impeller	BC6	
031	Shaft	316 Stainless Steel	
039-1	Impeller Key		
039-2	Coupling Key	S50C	
041	Impeller Nut	BC6	
051-1	Bearing Unit	FC200	
051-2	Bearing Unit		

No.	Part Name	Material	Qty
053-1	Bearing Cover	FC200	1
053-2	Bearing Cover		
093-1	Deflector (CP Side)	Rubber	
093-2	Deflector (CCP Side)		
107	Casing Water Ring	BC6	2
111-1	Mechanical Seal	-	1
111-2	Mechanical Seal	-	
117-1	Gasket (Casing)	V#6500	
129	Bearing Nut	SS400	
136	Bearing Washer		
156	Lock Pin	SUS304	2
291	Grease Nipple	C3604BD-F	

Mechanical Seal with Shaft Sleeve Type (Option)

No.	Part Name	Material	Qty
040-1	Shaft Sleeve (CP Side)	BC6	1
040-2	Shaft Sleeve (CCP Side)	BC6	

No.	Part Name	Material	Qty
117-2	Sleeve Gasket (CP Side)	V#6500	1
117-3	Sleeve Gasket (CCP Side)	v#6500	

Gland Packing Type 1 (Optional)

No.	Part Name	Material	Qty
124	Gland Bolt	C3604BD-F	4
018-1	Bearing Support (CP Side)	FC200	1
018-2	Bearing Support (CCP Side)		
042-1	Shaft Sleeve (CP Side)	BC6	1
042-2	Shaft Sleeve (CCP Side)		

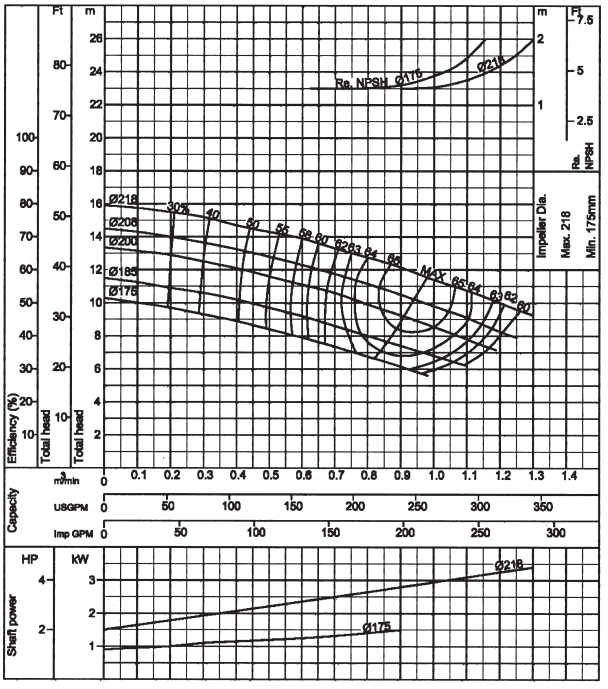
No.	Part Name	Material	Qty
091-1	Gland (CP Side)	BC6	1
091-2	Gland (CCP Side)		
090-1	Lantern Ring (CP Side)		
090-2	Lantern Ring (CCP Side)		
119-1	Gland Packing (CP Side)	Carbonised Fiber	5
119-2	Gland Packing (CCP Side)	Carbonised Fiber	5

PERFORMANCE CURVE 50Hz

100 x 80 CSGA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 1450min^{-1}) | S.G.= 1.0 Vis.= 1.0 cSt

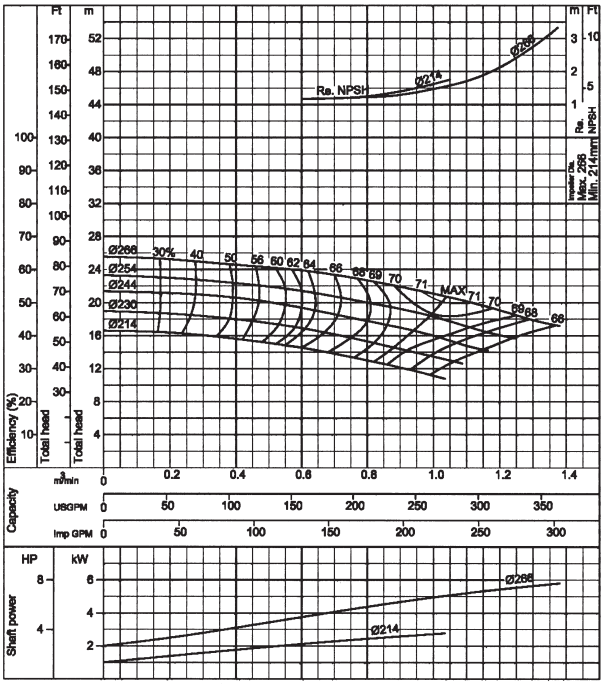


Curve No. -4 -5CN5601

100 x 80 CSHA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 1450min^{-1}) | S.G.= 1.0 Vis.= 1.0 cSt

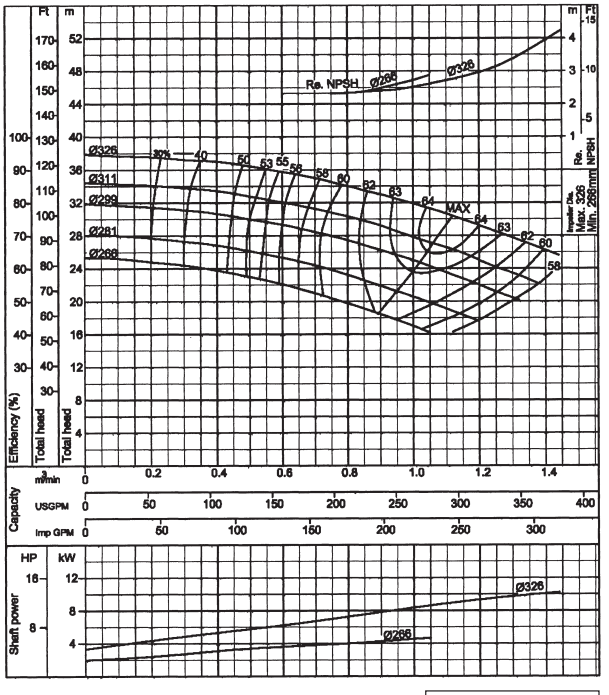


Curve No. -4 -5CN5602

100 x 80 CSJA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 1450min^{-1}) | S.G.= 1.0 Vis.= 1.0 cSt

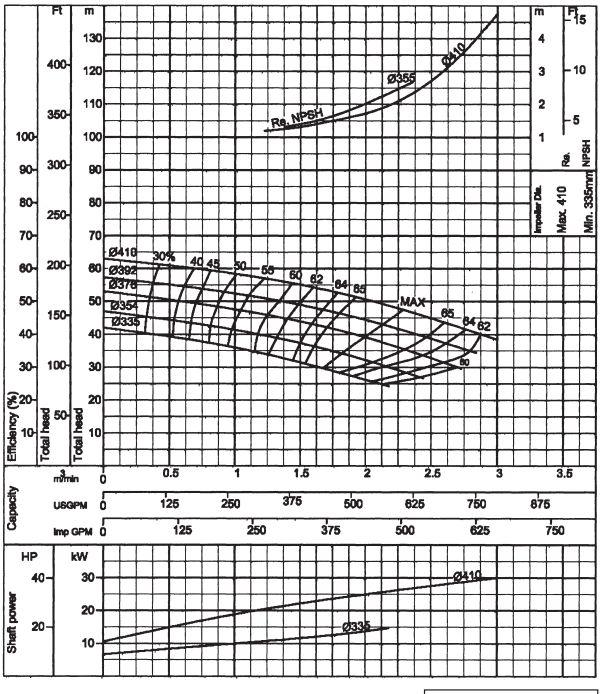


Curve No. -4 -5CN5603

125 x 100 CSJA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 1450min^{-1}) | S.G.= 1.0 Vis.= 1.0 cSt



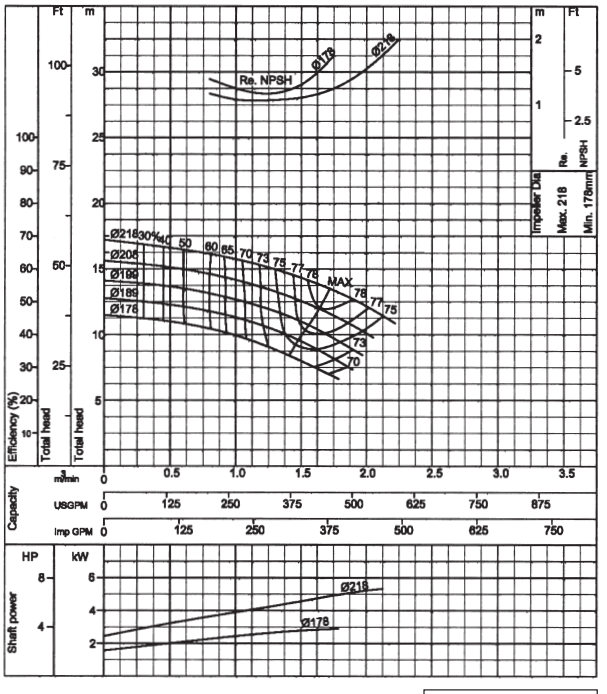
Curve No. -4 -5CN5604

PERFORMANCE CURVE 50Hz

125 x 100 CNGA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 1450min^{-1}) S.G.= 1.0 Vis.= 1.0 cSt

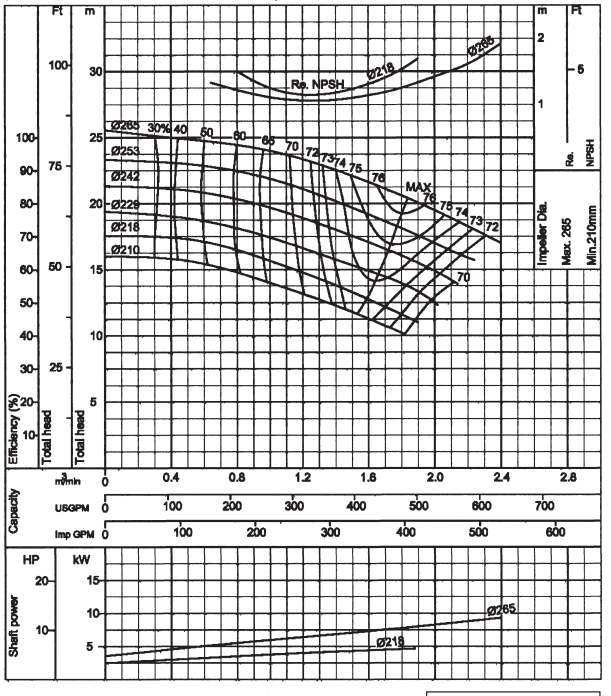


Curve No. -4 -5CN5605

125 x 100 CNHA

According to JIS testing code B8301, B8302

50Hz (Approx speed 1450min^{-1}) S.G.= 1.0 Vis.= 1.0 cSt

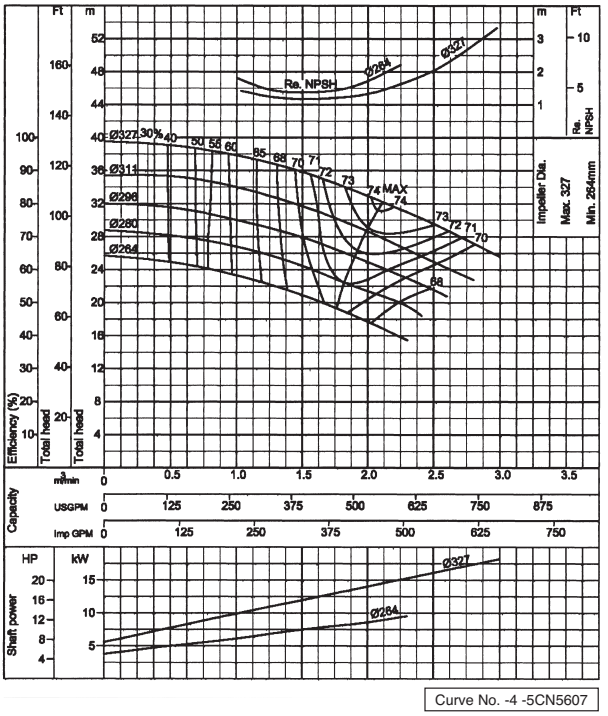


Curve No. -4 -5CN5606

125 x 80 CNJA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 1450min^{-1}) S.G.= 1.0 Vis.= 1.0 cSt

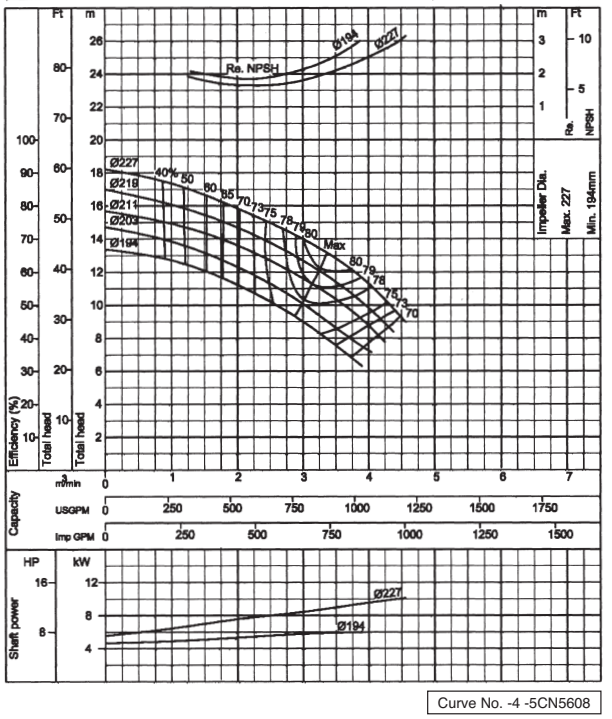


Curve No. -4 -5CN5607

150 x 150 CNFA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 1450min^{-1}) S.G.= 1.0 Vis.= 1.0 cSt



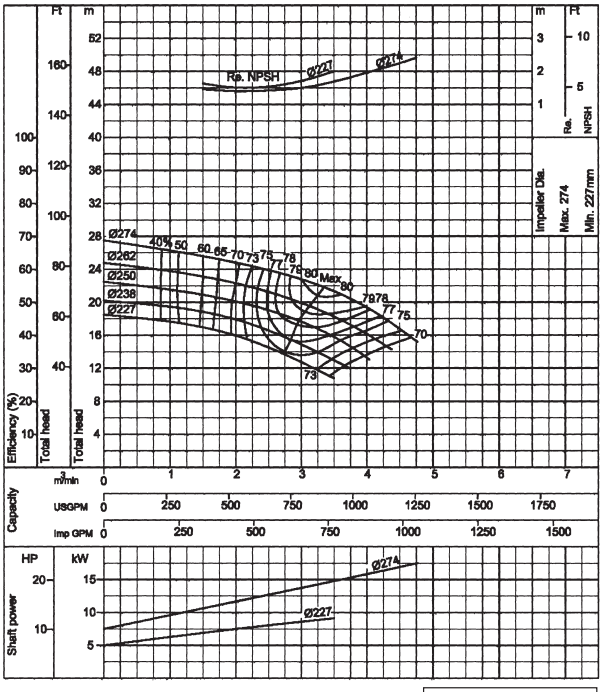
Curve No. -4 -5CN5608

PERFORMANCE CURVE 50Hz

150 x 125 CNGA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 1450min^{-1}) S.G.= 1.0 Vis.= 1.0 cSt

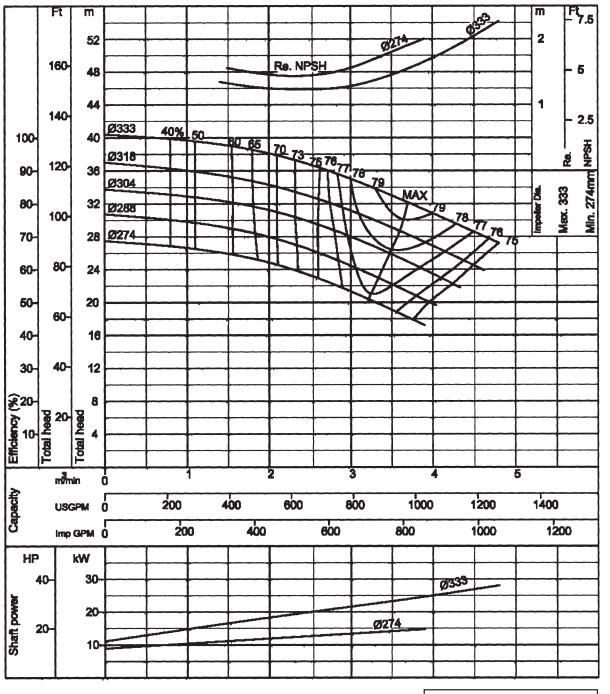


Curve No. -4 -5CN5609

150 x 125 CNHA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 1450min^{-1}) S.G.= 1.0 Vis.= 1.0 cSt

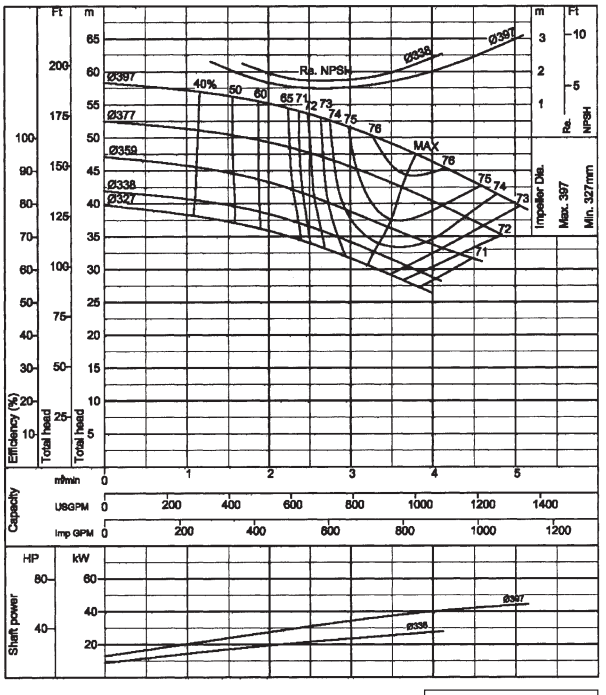


Curve No. -4 -5CN5610

150 x 100 CNJA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 1450min^{-1}) S.G.= 1.0 Vis.= 1.0 cSt

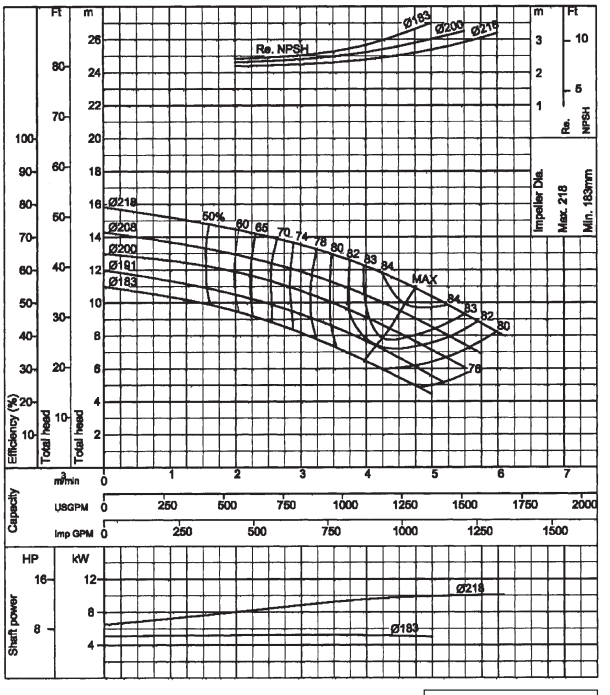


Curve No. -4 -5CN5611

200 CNEA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 1450min^{-1}) S.G.= 1.0 Vis.= 1.0 cSt



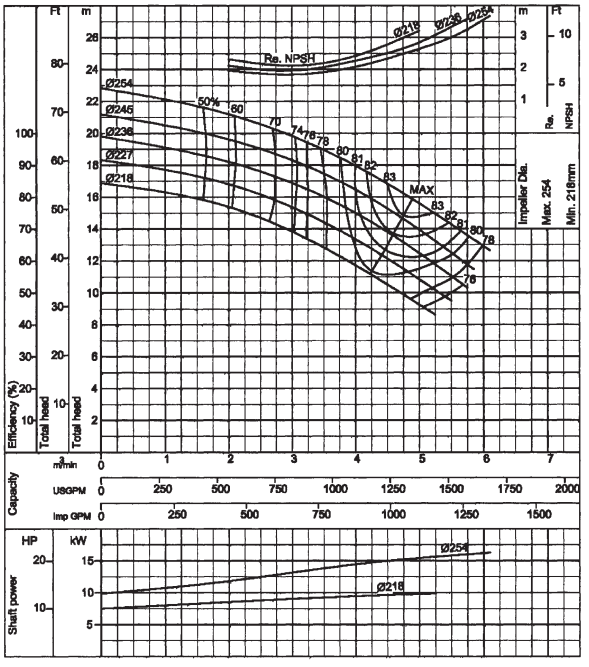
Curve No. -4 -5CN5612

PERFORMANCE CURVE 50Hz

200 x 150 CNFA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 1450min^{-1}) | S.G.= 1.0 Vis.= 1.0 cSt

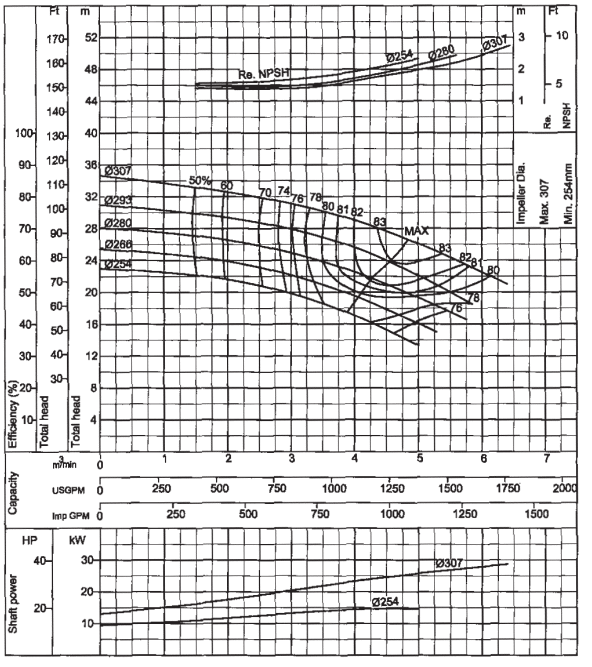


Curve No. - 4 - 5CN5613

200 x 150 CNGA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 1450min^{-1}) | S.G.= 1.0 Vis.= 1.0 cSt

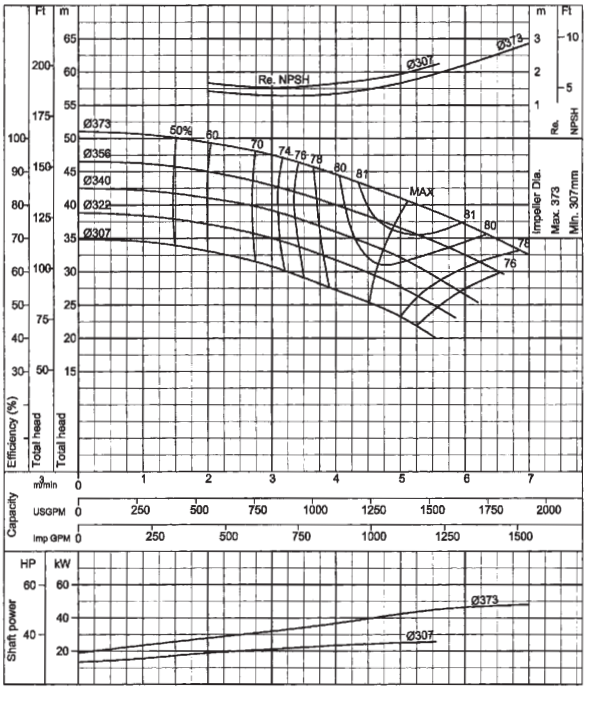


Curve No. - 4 - 5CN5614

200 x 150 CNHA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 1450min^{-1}) | S.G.= 1.0 Vis.= 1.0 cSt

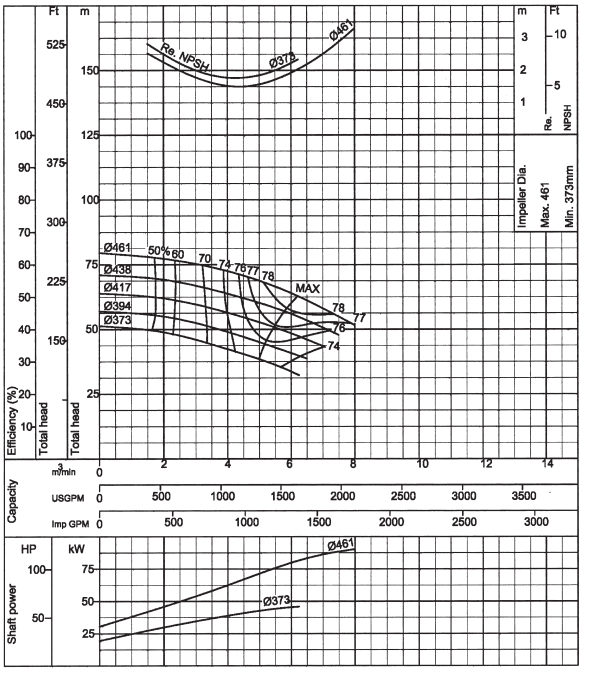


Curve No. - 4 - 5CN5615

200 x 100 CNJA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 1450min^{-1}) | S.G.= 1.0 Vis.= 1.0 cSt



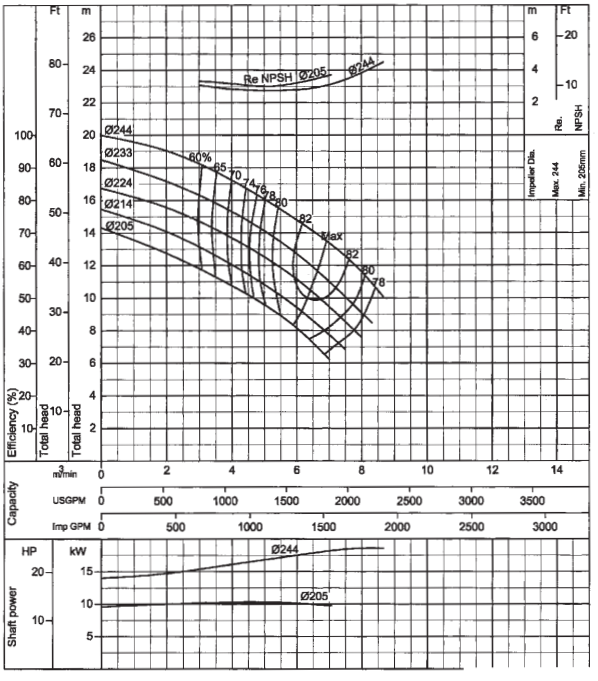
Curve No. - 4 - 5CN5616

PERFORMANCE CURVE 50Hz

250 x 200 CNEA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 1450min^{-1}) | S.G.= 1.0 Vis.= 1.0 cSt

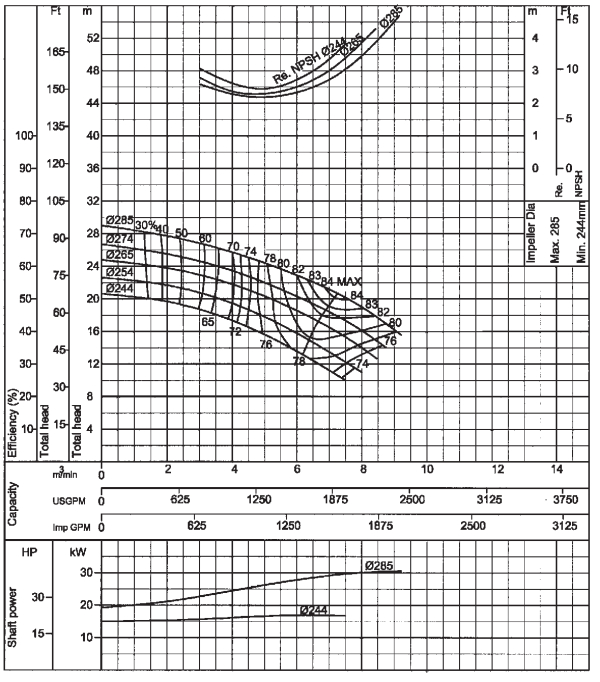


Curve No. - 4 - 5CN5617

250 x 200 CNFA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 1450min^{-1}) | S.G.= 1.0 Vis.= 1.0 cSt

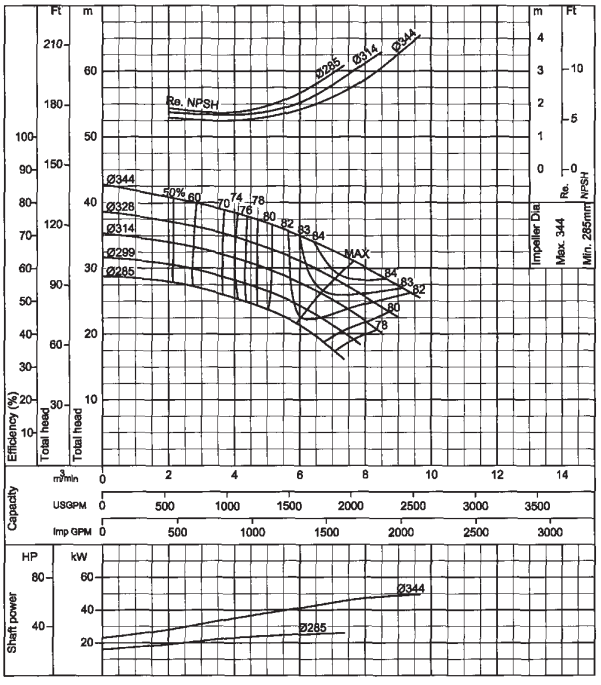


Curve No. - 4 - 5CN5618

250 x 150 CNGA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 1450min^{-1}) | S.G.= 1.0 Vis.= 1.0 cSt

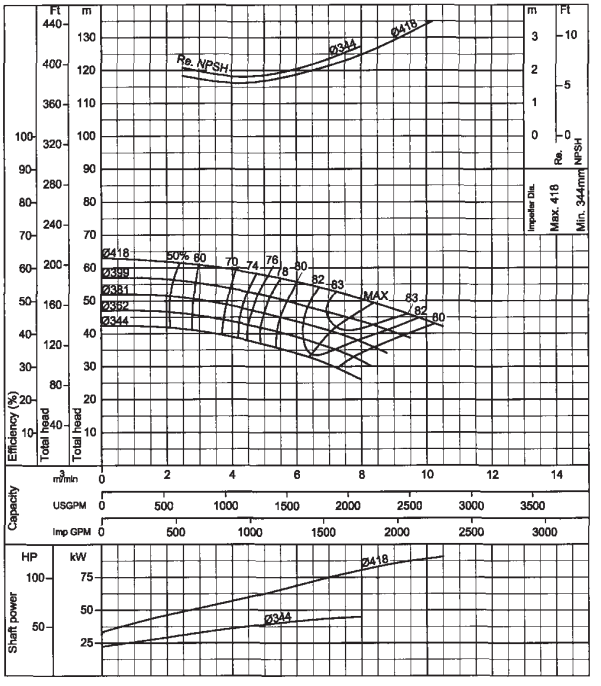


Curve No. - 4 - 5CN5619

250 x 150 CNHA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 1450min^{-1}) | S.G.= 1.0 Vis.= 1.0 cSt



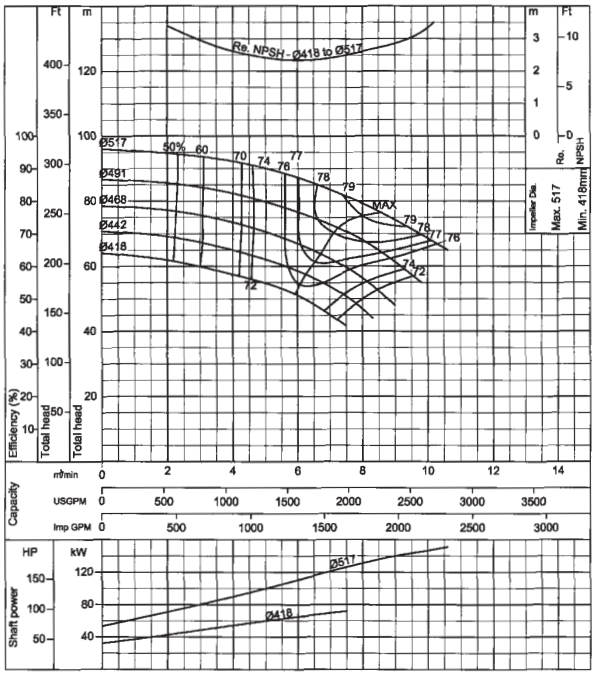
Curve No. - 4 - 5CN5620

PERFORMANCE CURVE 50Hz

250 x 150 CNJA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 1450min^{-1}) S.G.= 1.0 Vis.= 1.0 cSt

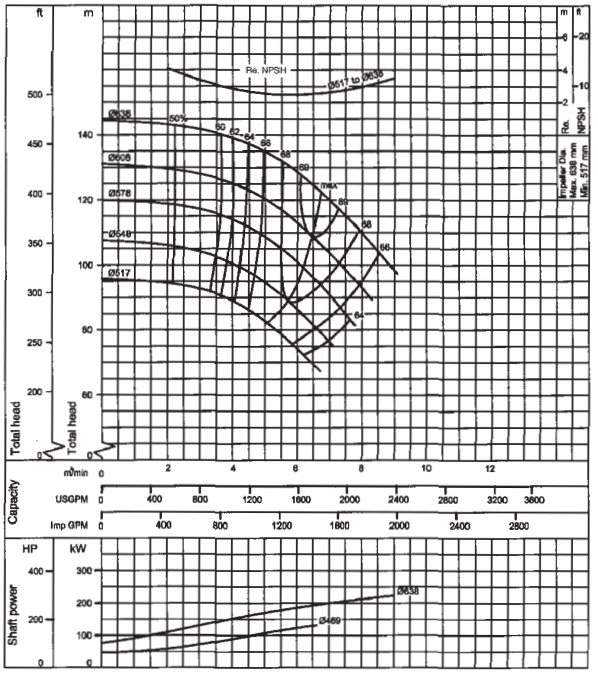


Curve No - 4 - 5CN5621

250 x 150 CNKA

According to ISO testing code 2548 Class C

50Hz (Approx. speed 1450 min^{-1}) S.G.= 1.0 Vis.= 1.0 cSt

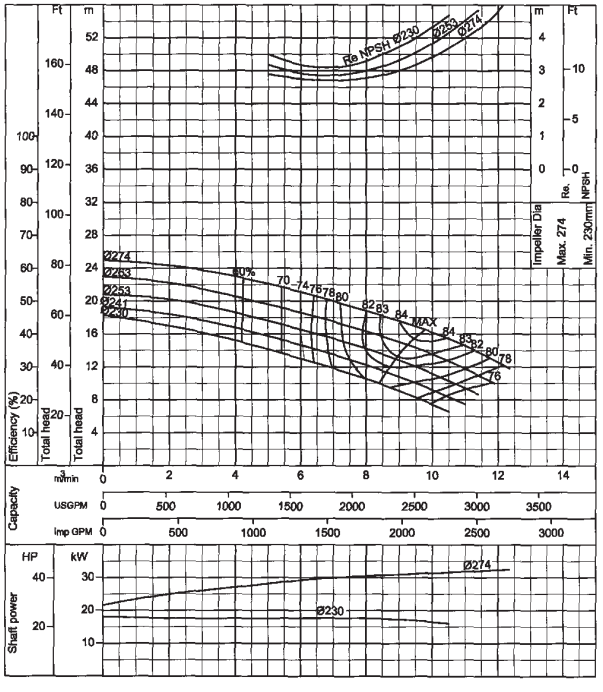


Curve No. - 4 - 5CN5620

300 x 250 CNEA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 1450min^{-1}) S.G.= 1.0 Vis.= 1.0 cSt

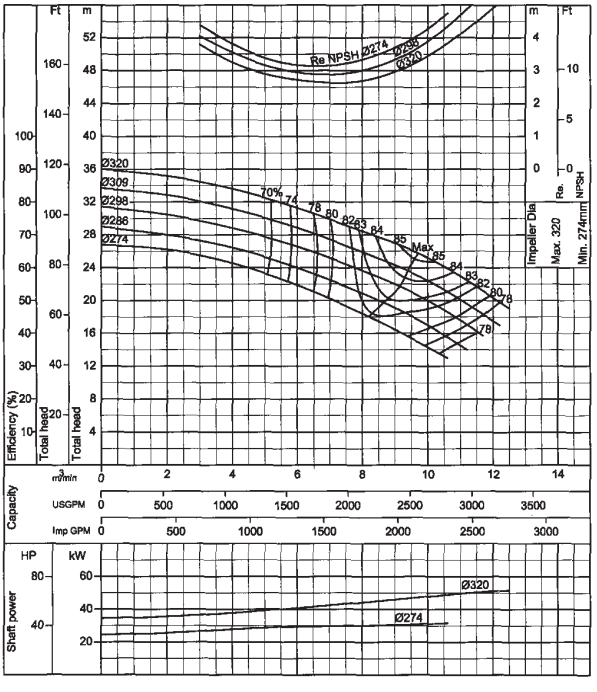


Curve No. - 4 - 5CN5622

300 x 200 CNFA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 1450min^{-1}) S.G.= 1.0 Vis.= 1.0 cSt



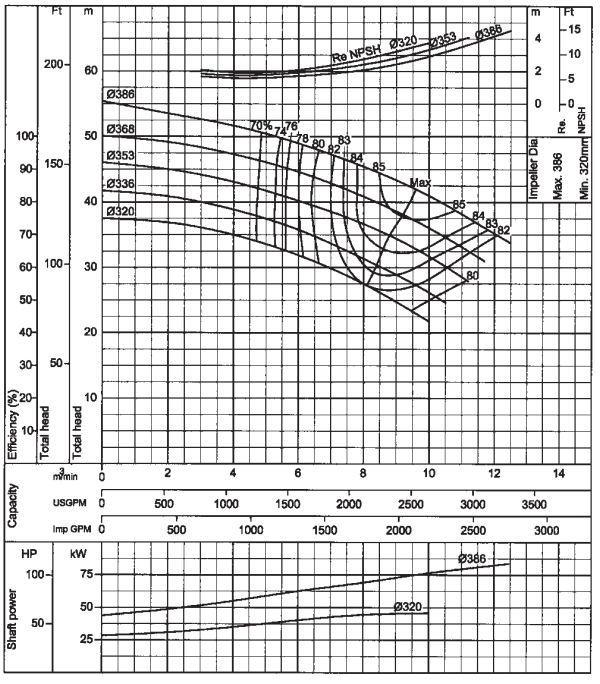
Curve No. - 4 - 5CN5623

PERFORMANCE CURVE 50Hz

300 x 200 CNGA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 1450min^{-1}) S.G.= 1.0 Vis.= 1.0 cSt

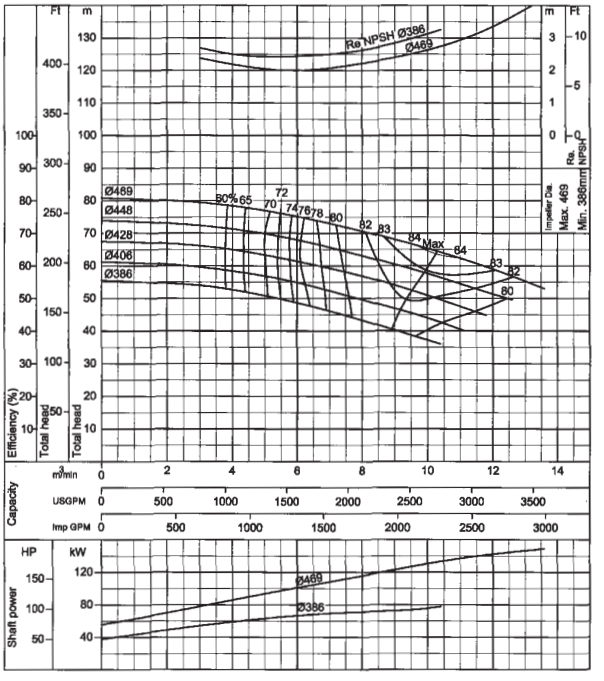


Curve No. - 4 - 5CN5624

300 x 200 CNHA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 1450min^{-1}) S.G.= 1.0 Vis.= 1.0 cSt

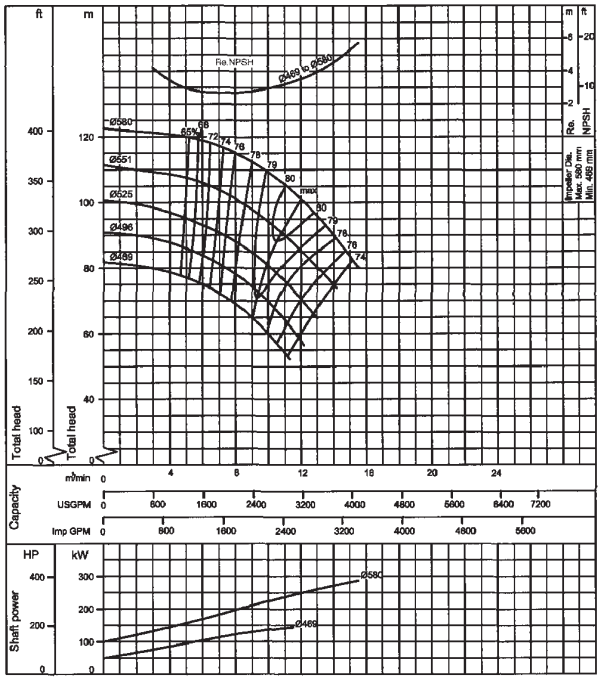


Curve No. - 4 - 5CN5625

300 x 150 CNJA

According to ISO testing code 2548 Class C

50Hz (Approx. speed 1450 min^{-1}) S.G.= 1.0 Vis.= 1.0 cSt

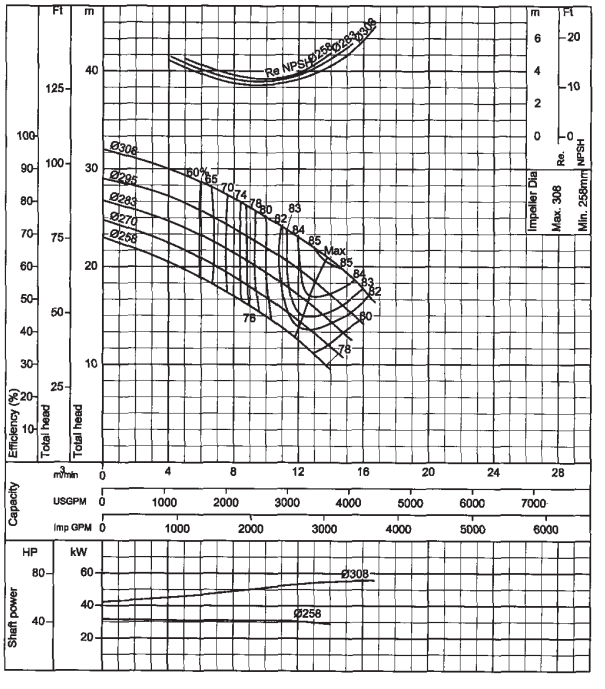


Curve No. - 4 - 5CN5630

300 x 250 CNFA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 1450min^{-1}) S.G.= 1.0 Vis.= 1.0 cSt



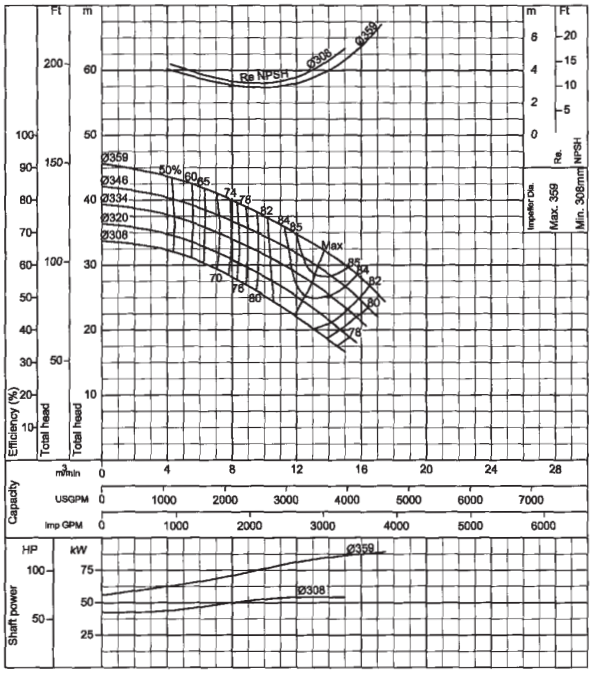
Curve No. - 4 - 5CN5626

PERFORMANCE CURVE 50Hz

300 x 250 CNGA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 1450min^{-1}) S.G.= 1.0 Vis.= 1.0 cSt

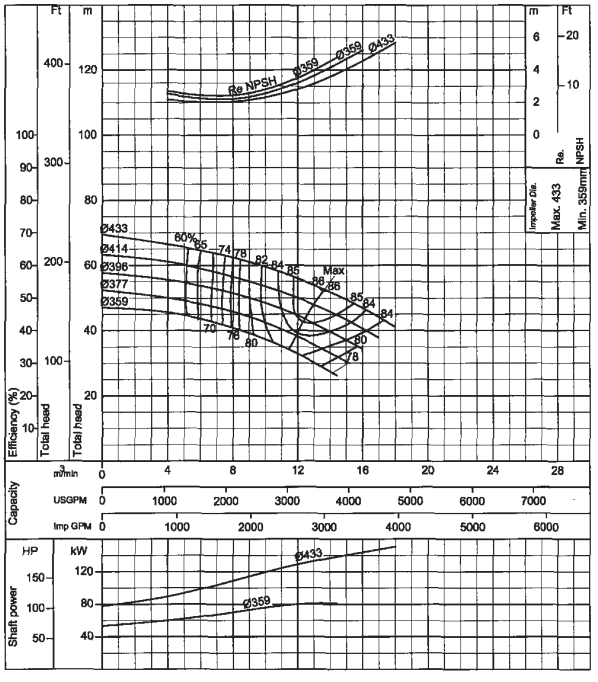


Curve No. - 4 - 5CN5627

300 x 250 CNHA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 1450min^{-1}) S.G.= 1.0 Vis.= 1.0 cSt

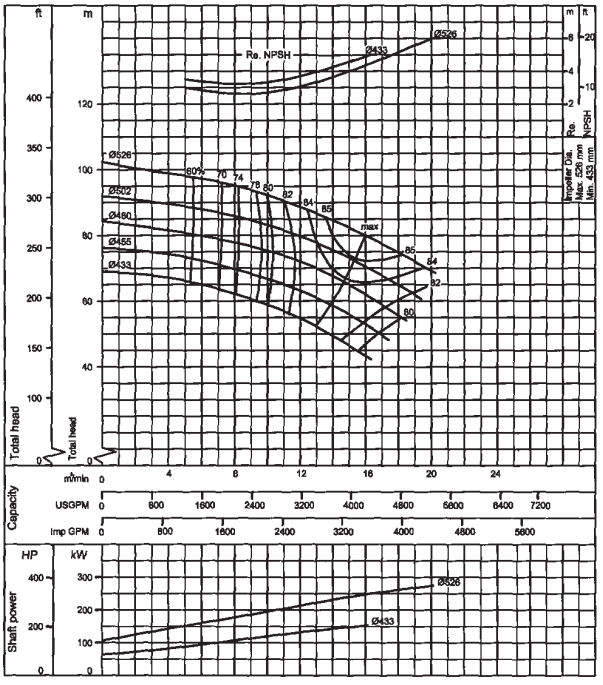


Curve No. - 4 - 5CN5628

300 x 200 CNJA

According to ISO testing code 2548 Class C

50Hz (Approx. speed 1450 min^{-1}) S.G.= 1.0 Vis.= 1.0 cSt

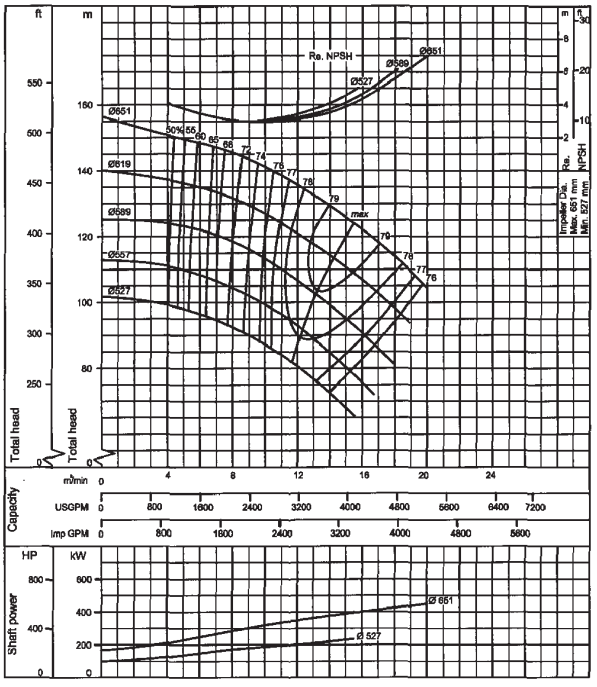


Curve No. - 4 - 5CN5631

300 x 200 CNKA

According to ISO testing code 2548 Class C

50Hz (Approx. speed 1450 min^{-1}) S.G.= 1.0 Vis.= 1.0 cSt



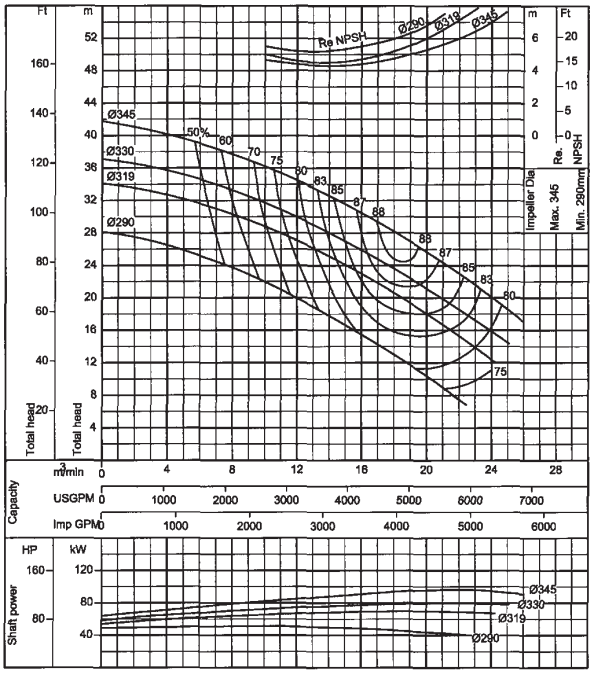
Curve No. - 4 - 5CN5632

PERFORMANCE CURVE 50Hz

350 x 300 CNFA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 1450min^{-1}) S.G.= 1.0 Vis.= 1.0 cSt

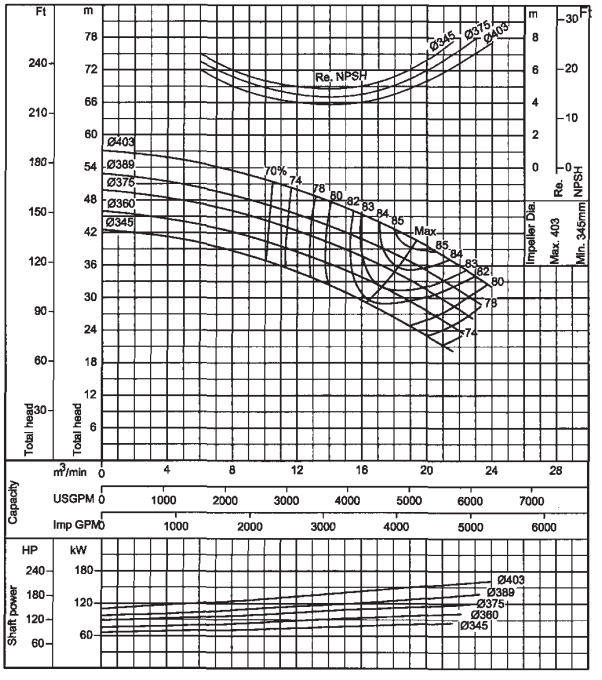


IDF0009E-E035A

350 x 250 CNGA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 1450min^{-1}) S.G.= 1.0 Vis.= 1.0 cSt

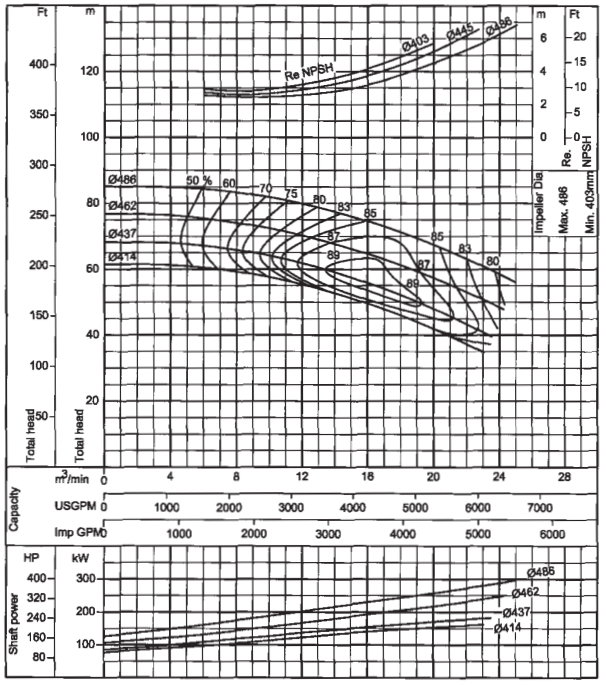


IDF0009E-E033A

350 x 250 CNHA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 1450min^{-1}) S.G.= 1.0 Vis.= 1.0 cSt

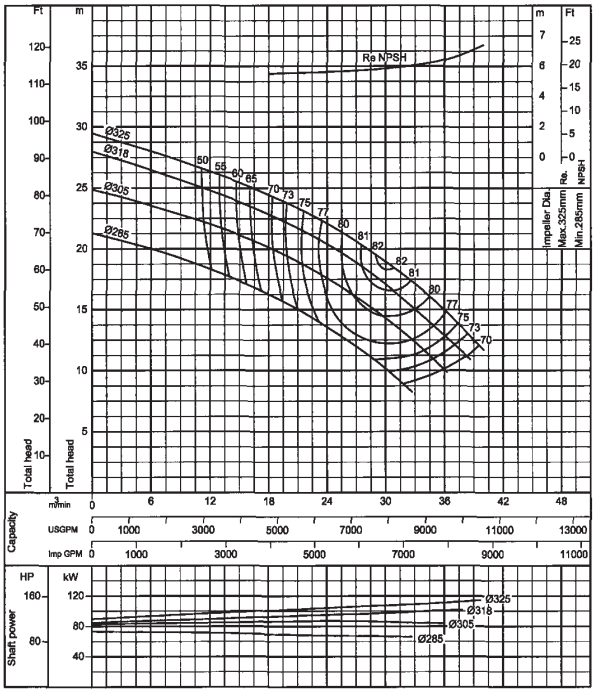


IDF0009E-E034A

400 x 350 CNEA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 1450min^{-1}) S.G.= 1.0 Vis.= 1.0 cSt



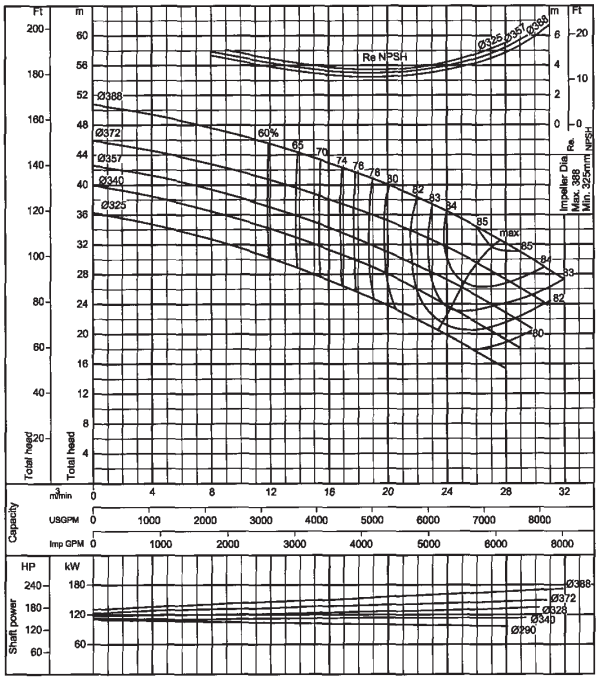
IDF0009E-E036A

PERFORMANCE CURVE 50Hz

400 x 350 CNFA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 1450min^{-1}) S.G.= 1.0 Vis.= 1.0 cSt

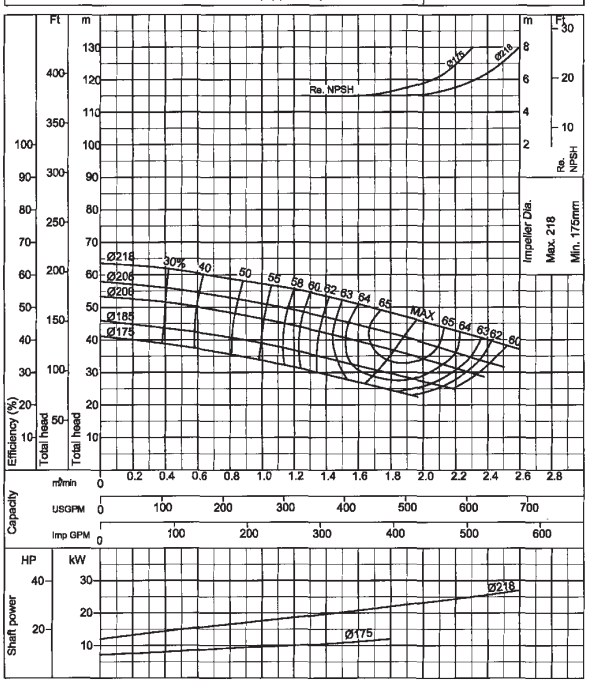


IDF0009E-E037A

100 x 80 CSGA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 2900min^{-1}) S.G.= 1.0 Vis.= 1.0 cSt

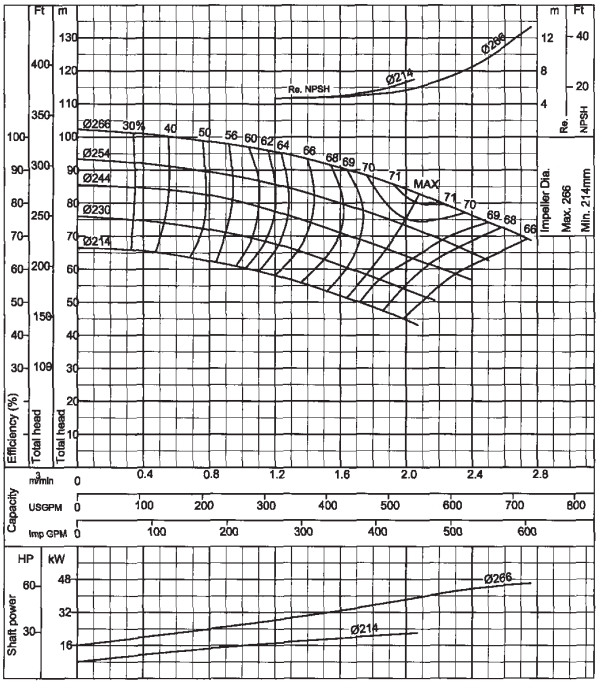


Curve No. - 2 - 5CN5601

100 x 80 CSHA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 2900min^{-1}) S.G.= 1.0 Vis.= 1.0 cSt

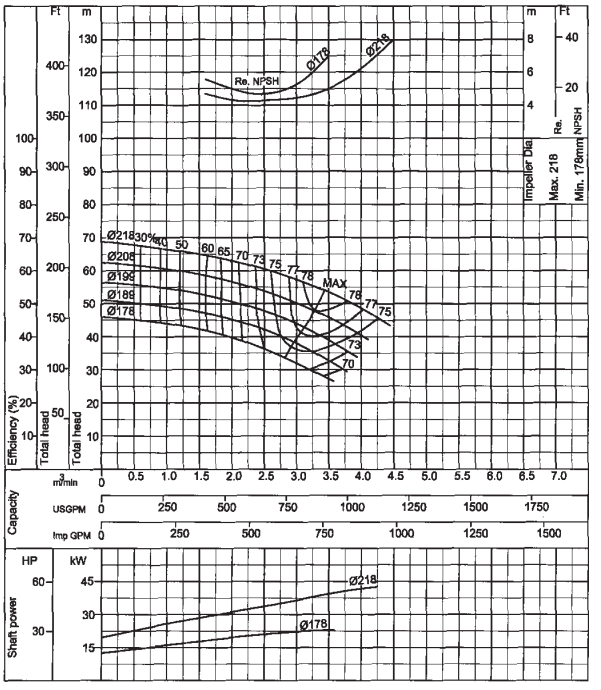


Curve No. - 2 - 5CN5602

125 x 100 CNGA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 2900min^{-1}) S.G.= 1.0 Vis.= 1.0 cSt



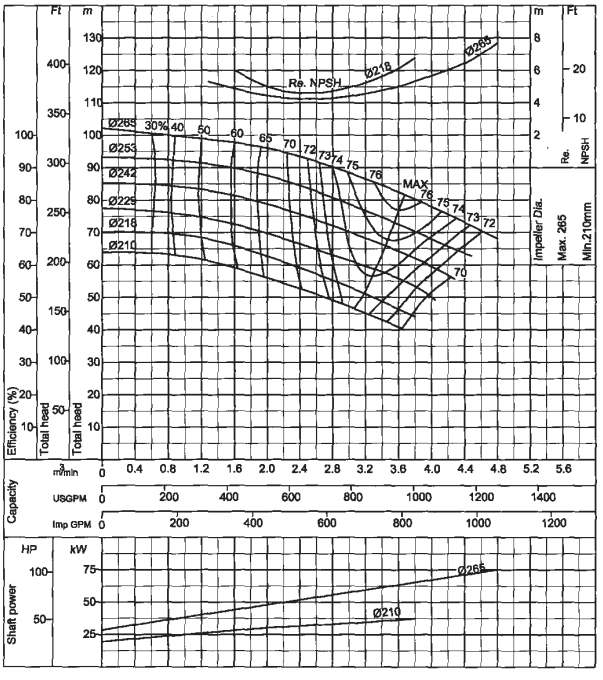
Curve No. - 2 - 5CN5603

PERFORMANCE CURVE 50Hz

125 x 100 CNHA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 2900min^{-1}) S.G.= 1.0 Vis.= 1.0 cSt

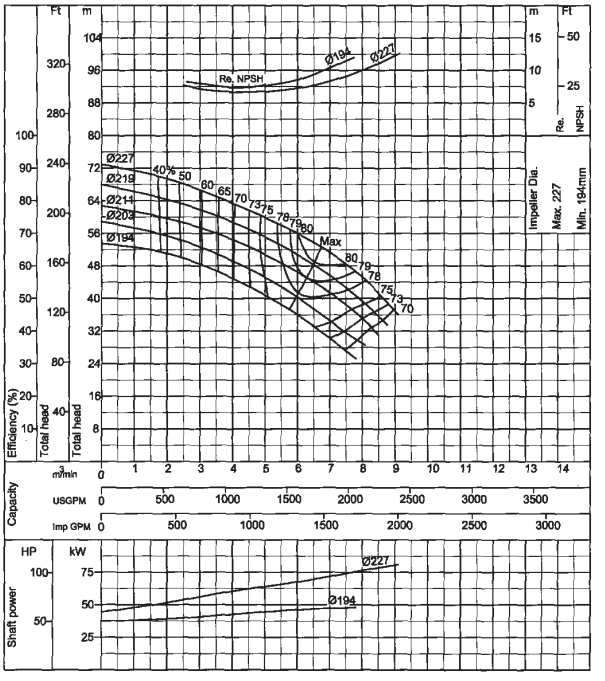


Curve No. - 2 - 5CN5604

150 x 150 CNFA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 2900min^{-1}) S.G.= 1.0 Vis.= 1.0 cSt

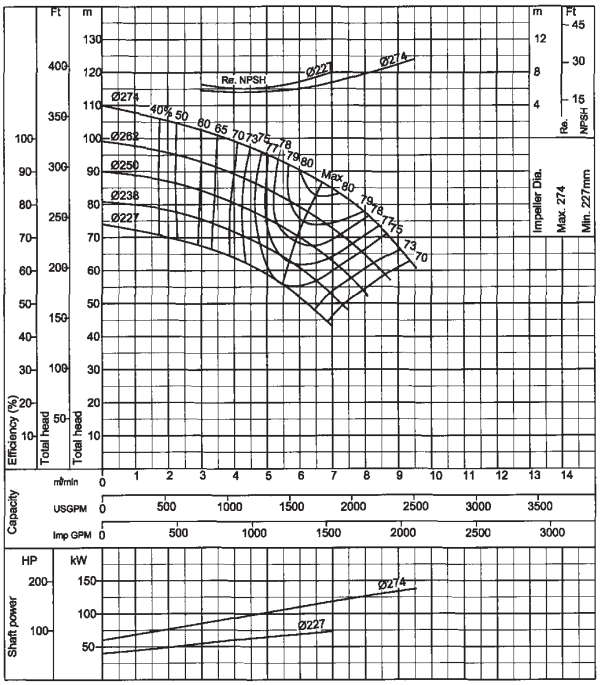


Curve No. - 2 - 5CN5606

150 x 125 CNGA

According to JIS testing code B8301, B8302

50Hz (Approx. speed 2900min^{-1}) S.G.= 1.0 Vis.= 1.0 cSt

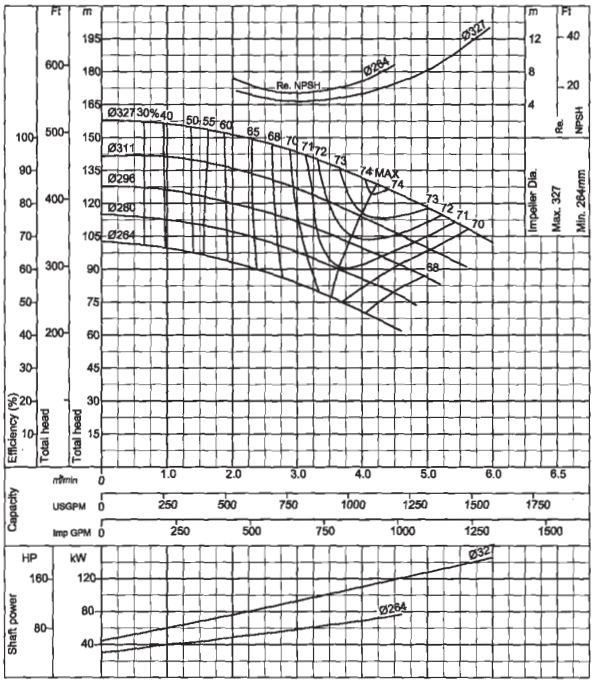


Curve No. - 2 - 5CN5607

125 x 80 CNJA

According to JIS testing code B8301, B8302

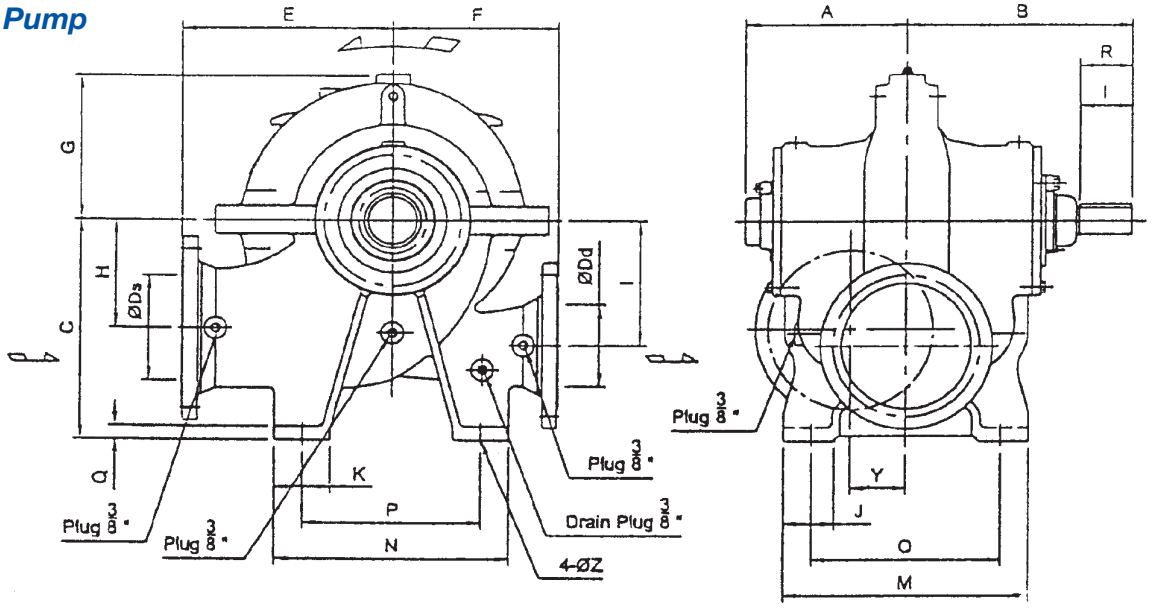
50Hz (Approx. speed 2900min^{-1}) S.G.= 1.0 Vis.= 1.0 cSt



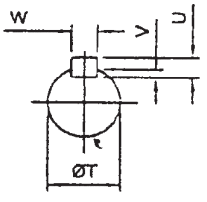
Curve No. - 2 - 5CN5605

DIMENSION - Bare Shaft Pump CSA 50Hz

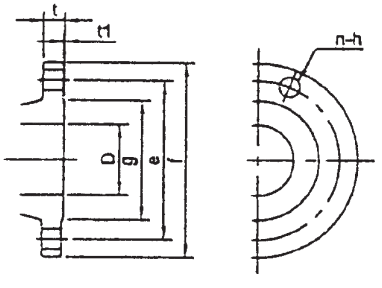
Pump



Shaft End



Flange



Dimension - Flange

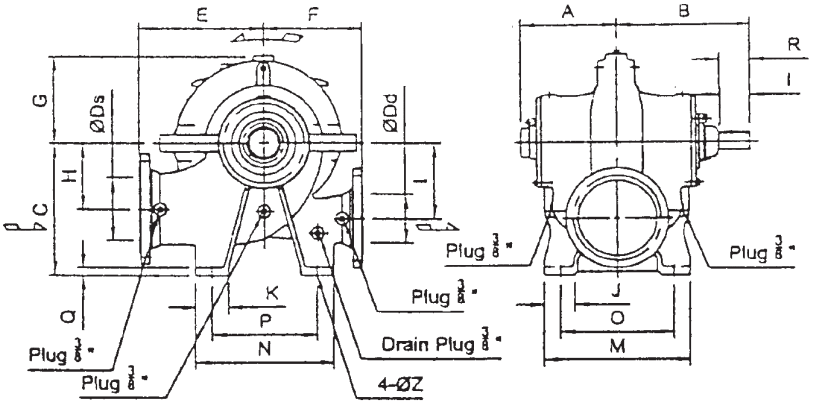
D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
80	200	160	135	2	24	8	23
100	225	185	160	2	26	8	23
125	270	225	195	2	26	8	25

Unit : mm

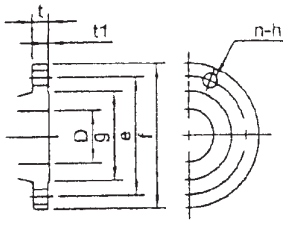
Model	Size		Pump																	Shaft						wt
	Ds	Dd	A	B	C	E	F	G	H	I	J	K	M	N	O	P	Q	Y	Z	L	R	T	U	V	W	kg
100 x 80 CSGA	100	80	221	250	295	270	240	169	140	140	60	70	300	290	250	230	20	70	19	56	68	28	8	5	10	143
100 x 80 CSHA						280	220	185	150	160																165
100 x 80 CSJA							230	202	160	180											63					200
125 x 100 CSJA	125	100	247	325	375	350	280	263	200	230	90	100	430	400	350	300	25	80		80	82	38			12	280

DIMENSION - Bare Shaft Pump CNA 50Hz

Pump



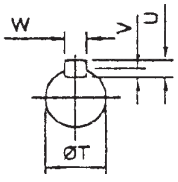
Flange



Dimension - Flange

D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
80	200	160	135	2	24	8	23
100	225	185	160	2	26	8	23
125	270	225	195	2	26	8	25
150	305	260	230	2	28	12	25
200	350	260	230	2	28	12	25
250	430	380	345	2	34	12	27
300	480	395	345	3	36	16	27
350	540	480	440	3	38	16	33
400	605	540	495	3	42	16	33

Shaft



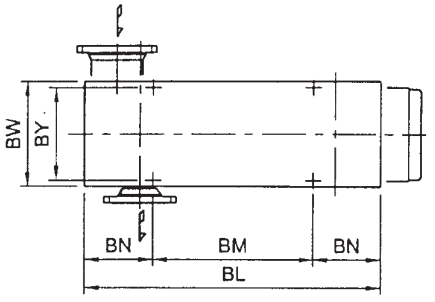
Dimension - Pump

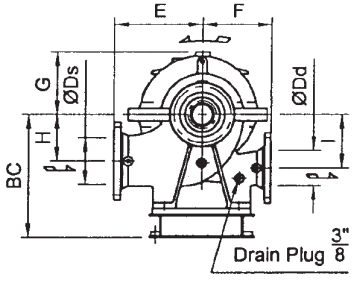
Unit : mm

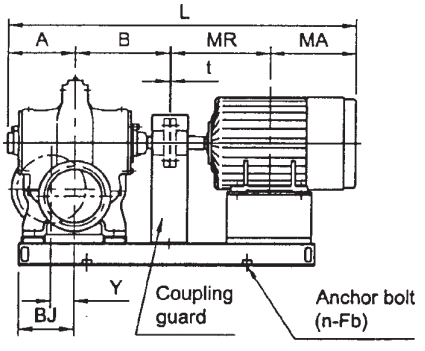
Model	Size		Pump																	Shaft						wt
	Ds	Dd	A	B	C	E	F	G	H	I	J	K	M	N	O	P	Q	Y	Z	L	R	T	U	V	W	kg
125 x 100 CNGA	125	100	231	350	295	290	250	181	150	150	60	70	300	290	250	230	20	-	19	80	82	38	8	5	10	209
125 x 100 CNHA						300		195		160																242
125 x 80 CNJA		80				330		226		190	70	80	340	320	280	250										250
150 x 150 CNFA	150	150	262	370	355	330	290	205	180	170	80	90	380	360	310	270	25	-	19	80	82	38	8	5	10	253
150 x 125 CNGA		125	271	395			260	224	190	190										90	102	48	9	5.5	14	275
150 x 125 CNHA			262	370		350	280	243		210										80	82	38	8	5	10	270
150 x 100 CNJA		100	271	395	390	380	290	269		240	90	100	430	400	350	300				90	102	48	9	5.5	14	330
200 x 200 CNEA	200	200	263	370	375	355	300	223	190	190	90	100	430	400	350	300	25	-	19	80	82	38	8	5	10	270
200 x 150 CNFA		150					285	244																		280
200 x 150 CNGA								245		210																310
200 x 150 CNHA			282	395	390	375	295	268	200	230										90	92	48	9	5.5	14	355
200 x 100 CNJA		100	305	450	445	420	335	309		270	100	110	480	450	390	340			24	100	112	55	10	6	16	445
250 x 200 CNEA	250	200	273	395	425	395	315	243	210	210	100	110	480	450	390	340	25	-	24	80	97	38	8	5	10	360
250 x 200 CNFA			282					247												90	92	48	9	5.5	14	380
250 x 150 CNGA		150			445			276		240																415
250 x 150 CNHA			315	450		430	325	299	220	260										100	102	55	10	6	16	500
250 x 150 CNJA			350	500	495	470	355	346		300	110	120	550	520	450	400	30			110	124	65	11	7	18	605
250 x 150 CNKA			382	530	500	505	430	407	290	345										125	141	75	12	8	20	835
300 x 250 CNEA	300	250	302	415	475	445		274	235	235	110	120	550	520	450	400	30	-	24	90	92	48	9	5.5	14	435
300 x 200 CNFA		200	315	450				280												100	102	55	10	6	16	490
300 x 200 CNGA				470	495			300		270											122					520
300 x 200 CNHA			350	500		465	365	332		290										110	124	65	11	7	18	625
300 x 150 CNJA		150	382	530	500	520	405	384	250	335										125	141	75	12	8	20	785
300 x 250 CNFA		250	335	470	495	495	405	306		260										100	102	55	10	6	16	570
300 x 250 CNGA			360	500				313												110	114	65	11	7	18	620
300 x 250 CNHA					520			337	275	295																615
300 x 200 CNJA		200	382	530	500	525	415	379		320										125	141	75	12	8	20	860
300 x 200 CNKA			415	585	560	570	475	436	290	380	140	150	620	700	500	550	35	-	26	140	156	85	14	9	22	1070
350 x 300 CNFA	350	300	386	530	600	560	450	345	310	310	130	150	620	700	500	550	38	-	24	110	125	65	11	7	18	800
350 x 250 CNGA		250						350		303	135															790
350 x 250 CNHA			414	560			440	373	315	330										125	140	75	12	7.5	20	845
400 x 350 CNEA	400	350	451	600	630	570	470	355	320	320	140	150	700	700	550	550	35	-	26	110	124	65	11	7	18	1030
400 x 350 CNFA			439	585		625	510	385	305	344	150						38			125	140	75	12	7.5	20	1035

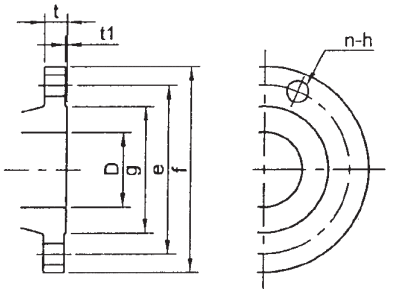
Unit : mm, unless otherwise stated

DIMENSION - CSA Pump with Motor 4-Poles Drive 50Hz









Dimension - Flange

D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
80	200	160	135	2	24	8	23
100	225	185	160	2	26	8	23
125	270	225	195	2	26	8	25

Dimension - Pump

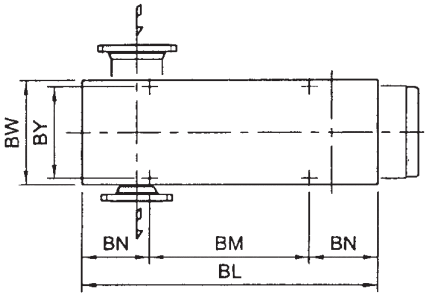
Model	Motor	Size		Pump									Motor				Common Base									Total		
	kW	Ds	Dd	A	B	E	F	G	H	I	Y	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L	wt kg
100 x 80 CSGA	2.2	100	80	221	250	270	240	169	140	140	70	143	100L	193	170	30	411	170	720	420	150	380	330	4-M12	37	3	837	210
	3.7												112M	200	182	42			730	430					37		856	222
100 x 80 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
	5.5												132S	239	207	65			770	470					38		920	268
	7.5												132M	258	226	76			810	510					39		958	280
100 x 80 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
	7.5												132M	258	226	76			810	510					39		958	315
	11												160M	323	281	120			890	590					43		1078	363
125 x 100 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
	18.5												180M	351.5	315.5	180			1080	730					89		1242	549
	22												180L	370.5	334.5	205			1120	690	215				92		1280	577
	30												200L	395.5	372.5	290			1160	730					96	4	1344	666

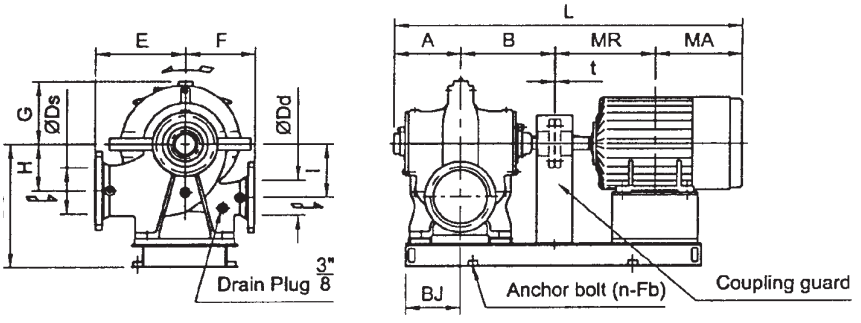
* Common base weight includes the shaft coupling and coupling gurd. All dimension shown are for reference only. Please refer to EBARA for actual fabrication details.

Unit : mm, unless otherwise stated

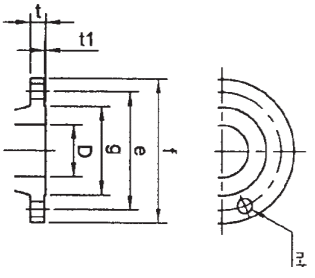
DIMENSIONS - CNA Pump with Motor 4-Poles Drive (1/6) 50Hz

Pump





Flange



Dimension - Flange

D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
80	200	160	135	2	24	8	23
100	225	185	160	2	26	8	23
125	270	225	195	2	26	8	25
150	305	260	230	2	28	12	25

Dimension - Pump

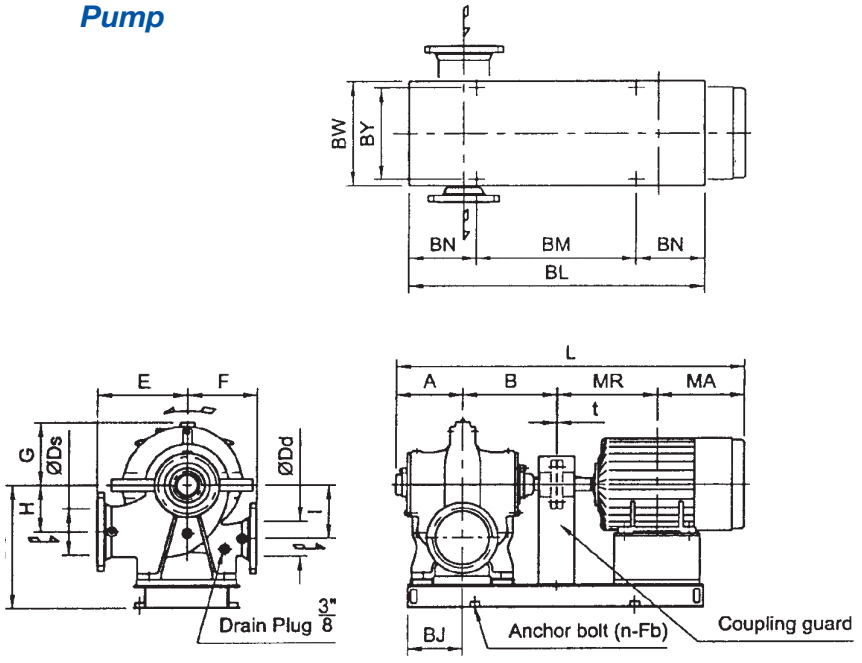
Model	Motor	Size		Pump								Motor				Common Base								Total		
	kW	Ds	Dd	A	B	E	F	G	H	I	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L	wt kg
125 x 100 CNGA	3.7	125	100	231	350	290	250	181	150	150	209	112M	200	182	42	411	170	830	530	150	380	330	4-M12	39	3	966	290
	5.5											132S	239	207	65			870	570					40		1030	314
	7.5											132M	258	226	76			900	550	175				45		1068	330
125 x 100 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
	11											160M	323	281	120			990	640				4-M16	56		1188	418
125 x 80 CNJA	11	125	80	231	350	330	250	226	150	190	250	160M	323	281	120	411	190	1010	780	175	400	350	4-M16	60	3	1188	430
	15											160L	345	303	158			1050	700					62		1232	470
	18.5											180M	351.5	315.5	180			1060	710					82		1251	512
150 x 150 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
150 x 125 CNGA	11	150	125	262	395	330	260	224	190	190	275	160M	323	281	120	471	210	1070	640	215	450	400	4-M16	77	3	1273	472
	15											160L	345	303	158			1120	690					79		1317	512
	18.5											180M	351.5	315.5	180			1130	700					86		1336	541
150 x125 CNHA	18.5	150	125	262	370	350	280	243	190	210	270	180M	351.5	315.5	180	471	210	1100	670	215	450	400	4-M16	85	3	1302	535
	22											180L	370.5	334.5	205			1140	710					87		1340	562
	30											200L	395.5	372.5	290			1180	750		500	450		95	4	1404	655
150 x 100 CNJA	30	150	100	271	395	380	290	269	190	240	330	200L	395.5	372.5	290	506	235	1230	800	215	450	400	4-M16	98	4	1438	718
	37											225S	432	379	320			1260	830		500	450		106		1481	756
	45											225M	444.5	391.5	358			1290	860					108		1506	796

* Common base weight includes the shaft coupling and coupling gurd. All dimension shown are for reference only. Please refer to EBARA for actual fabrication details.

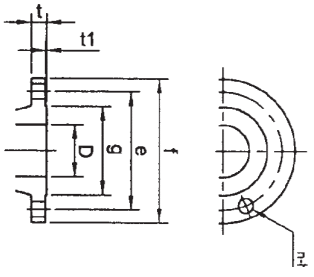
Unit : mm, unless otherwise stated

DIMENSION - CNA Pump with Motor 4-Poles Drive (2/6) 50Hz

Pump



Flange



Dimension - Flange

D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
100	225	185	160	2	26	8	23
150	305	260	230	2	28	12	25
200	350	305	275	2	30	12	25

Dimension - Pump

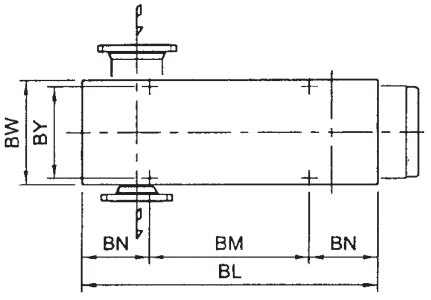
Model	Motor	Size		Pump								Motor				Common Base									Total		
	kW	Ds	Dd	A	B	E	F	G	H	I	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L	wt kg
200 x 200 CNEA	7.5	200	200	263	370	355	300	223	190	190	270	132M	258	226	76	491	235	990	640	175	450	400	4-M16	74	3	1120	420
	11											160M	323	281	120			1070	720					78		1240	468
	15											160L	345	303	158			1120	690	215				80		1284	508
200 x 150 CNFA	15	200	150	263	370	355	286	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		1303	551
200 x 150 CNGA	18.5	200	150	263	370	355	285	245	200	210	310	180M	351.5	315.5	180	491	235	1130	700	215	450	400	4-M16	91	3	1303	581
	22											180L	370.5	334.5	205			1160	730					93		1341	608
	30											200L	395.5	372.5	290			1210	780					97	4	1405	697
	37											225S	432	379	320			1240	810		500	450		105		1448	735
200 x 150 CNHA	30	200	150	282	395	375	295	268	200	230	355	200L	395.5	372.5	290	506	235	1230	800	215	450	400	4-M16	98	4	1449	743
	37											225S	432	379	320			1260	880		500	450		106		1492	781
	45											225M	444.5	391.5	358			1290	660					108		1517	821
	55											250S	463.5	409	520	531		1310	890		560	500	4-M20	143		1554	1018
200 x 100 CNJA	45	200	100	305	450	420	335	309	200	270	445	225M	444.5	391.5	358	561	260	1370	940	215	500	450	4-M16	117	4	1595	920
	55											250S	463.5	409	520			1390	960		560	500		155		1632	1120
	75											250M	482.5	428	580	586		1430	1000				4-M20	159		1670	1184
	90											280S	544	463	700			1500	950	275	640	580		179		1766	1324

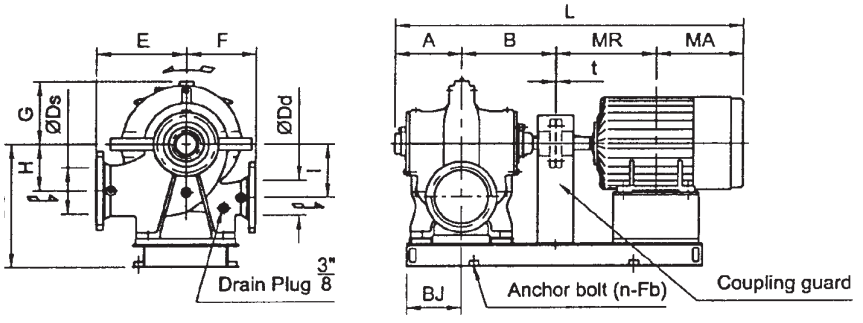
* Common base weight includes the shaft coupling and coupling gurd. All dimension shown are for reference only. Please refer to EBARA for actual fabrication details.

Unit : mm, unless otherwise stated

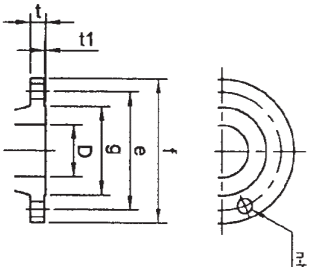
DIMENSION - CNA Pump with Motor 4-Poles Drive (3/6) 50Hz

Pump





Flange



Dimension - Flange

D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
150	305	260	230	2	28	12	25
200	350	305	275	2	30	12	25
250	430	380	345	2	34	12	27

Dimension - Pump

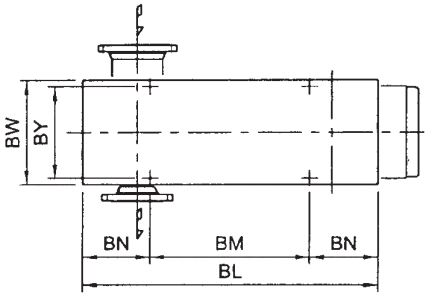
Model	Motor	Size		Pump								Motor				Common Base									Total		
	kW	Ds	Dd	A	B	E	F	G	H	I	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L	wt kg
250 x 200 CNEA	15	250	200	273	395	395	315	243	210	210	360	160L	345	303	158	541	260	1170	740	215	500	450	4-M16	90	3	1319	608
	18.5											180M	351.5	315.5	180			1180	750					103		1338	643
	22											180L	370.5	334.5	205			1210	780					107		1376	672
250 x 200 CNFA	22	250	200	282	395	395	315	247	210	210	380	180L	370.5	334.5	205	541	260	1210	780	215	500	450	4-M16	107	3	1385	692
	30											200L	395.5	372.5	290			1260	830					109	4	1449	779
	37											225S	432	379	320			1290	860					114		1492	814
250 x 150 CNGA	37	250	150	282	395	395	315	276	220	240	415	225S	432	379	320	561	260	1290	860	215	500	450	4-M16	114	4	1492	849
	45											225M	444.5	391.5	358			1310	880					115		1517	888
	55											250S	463.5	409	520	586		1330	900		560	500	4-M20	153		1554	1088
250 x 150 CNHA	55	250	150	315	450	430	325	299	220	260	500	250S	463.5	409	520	586	260	1390	960	215	560	500	4-M20	155	4	1642	1175
	75											250M	482.5	428	580			1430	1000					159		1680	1239
	90											280S	544	463	700			1500	950	275	640	580		179		1776	1379
250 x 150 CNJA	75	250	150	350	500	470	355	346	220	300	605	250M	482.5	428	580	636	295	1520	970	275	580	520	4-M20	172	4	1765	1357
	90											280S	544	463	700			1580	1030		640	580		184		1861	1489
	110											280M	569.5	488.5	800			1640	2x645	175			6-M20	188		1912	1592
	132											315S	589	517	1030			1650	2x650					215		1960	1850
	150											315M	614.5	552.5	1030			1700	2x875					220		2011	1855
250 x 150 CNKA	110	250	150	382	530	505	430	407	290	345	835	280M	589.5	488.5	800	666	300	1680	2x665	175	640	580	6-M20	192	4	1988	1827
	132											315S	589	517	920			1700	2x675					220		2032	1975
	150											315M	614.5	552.5	1030			1750	2x700					235		2083	2100
	185											315M	614.5	552.5	1070			1750	2x700					235		2083	2140
	220											315AB	666	830	1450			1910	2x740	215	700	640		270	5	2413	2555

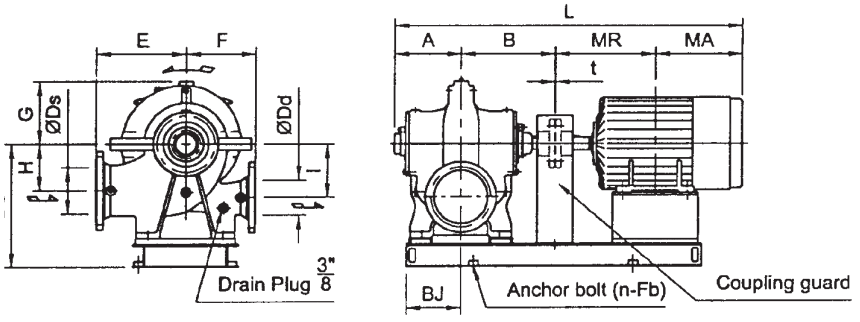
* Common base weight includes the shaft coupling and coupling gurd. All dimension shown are for reference only. Please refer to EBARA for actual fabrication details.

Unit : mm, unless otherwise stated

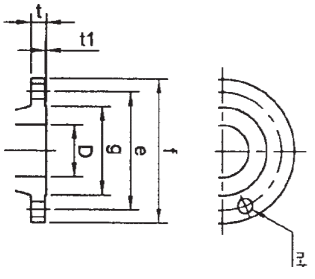
DIMENSION - CNA Pump with Motor 4-Poles Drive (4/6) 50Hz

Pump





Flange



Dimension - Flange

D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
150	305	260	230	2	28	12	25
200	350	305	275	2	30	12	25
250	430	380	345	2	34	12	27
300	480	430	395	3	36	16	27

Dimension - Pump

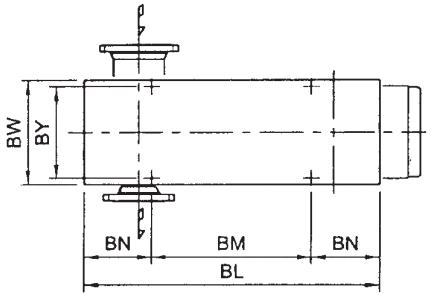
Model	Motor	Size		Pump								Motor				Common Base								Total		
	kW	Ds	Dd	A	B	E	F	G	H	I	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L	wt kg
300 x 250 CNEA	22	300	250	302	415	445	355	274	235	235	435	180L	370.5	334.5	205	616	295	1270	840	215	600	540	4-M20	141	4	1425	781
	30											200L	395.5	372.5	290			1310	880					144		1489	869
	37											225S	432	379	320			1340	910					149		1532	904
300 x 200 CNFA	37	300	200	315	450	445	355	280	235	235	490	225S	432	379	320	616	295	1370	940	215	600	540	4-M20	160	4	1580	970
	45											225M	444.5	391.5	358			1400	970					162		1605	1010
	55											250S	463.5	409	520			1420	990					167		1642	1177
300 x 200 CNGA	55	300	200	315	470	445	355	300	250	270	520	250S	463.5	409	520	636	295	1440	1010	215	640	580	4-M20	167	4	1662	1207
	75											250M	482.5	428	580			1480	1050					171		1770	1271
	90											280S	544	463	700			1550	1000	275				183		1796	1403
300 x 200 CNHA	90	300	200	350	500	465	365	332	250	290	625	280S	544	463	700	636	295	1580	1030	275	640	580	4-M20	184	4	1861	1509
	110											280M	569.5	488.5	800			1640	2x645				6-M20	188		1912	1613
	132											315S	589	517	1030			1650	2x650	175				215		1960	1870
	150											315M	614.5	552.5	1030			1700	2x725					220		2011	1875
300 x 150 CNJA	150	300	150	382	530	520	405	384	250	335	785	315M	614.5	552.5	1030	666	300	1750	2x700	175	640	580	6-M20	235	4	2083	2050
	185											315M	614.5	552.5	1070			1750	2x700					235		2083	2090
	220											315AB	666	830	1450			1910	2x740	215	700	640	6-M22	270	5	2413	2505
	260											315CB	741	905	1660			2060	2x755	275				280		2563	2725
	300											315CB	741	905	1800			2060	2x755					280		2563	2865

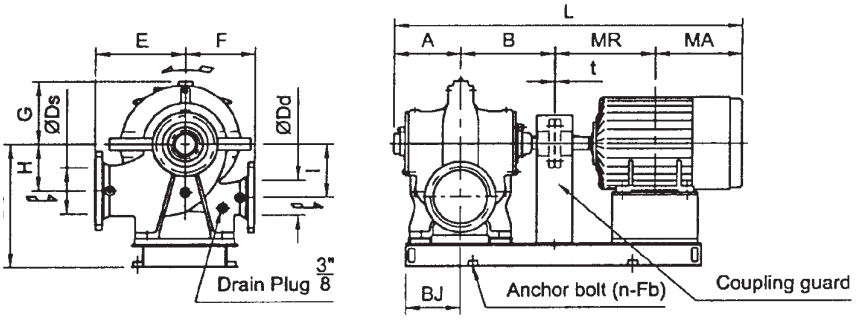
* Common base weight includes the shaft coupling and coupling gurd. All dimension shown are for reference only. Please refer to EBARA for actual fabrication details.

Unit : mm, unless otherwise stated

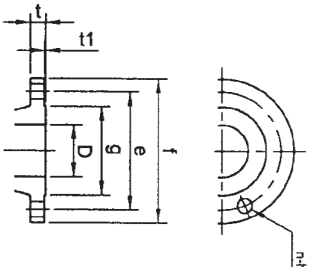
DIMENSION - CNA Pump with Motor 4-Poles Drive (5/6) 50Hz

Pump





Flange



Dimension - Flange

D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
200	350	305	275	2	30	12	25
250	430	380	345	2	34	12	27
300	480	430	395	3	36	16	27

Dimension - Pump

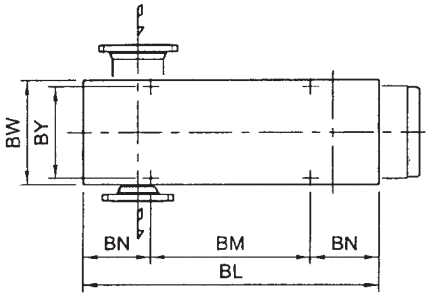
Model	Motor	Size		Pump								Motor				Common Base									Total		
	kW	Ds	Dd	A	B	E	F	G	H	I	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L	wt kg
300 x 250 CNFA	37	300	250	335	470	495	405	306	250	260	570	225S	432	379	320	636	295	1400	970	215	600	540	4-M20	160	4	1620	1050
	45											225M	444.5	391.5	358			1410	980					162		1645	1090
	55											250S	463.5	409	520			1440	1010		640	580		167		1682	1257
	75											250M	482.5	428	580			1480	1050					171		1720	1321
300 x 250 CNGA	75	300	250	360	500	495	405	313	250	260	620	250M	482.5	428	580	616	295	1370	970	275	580	520	4-M20	172	4	1775	1372
	90											280S	544	463	700			1400	980		640	580		184		1871	1504
	110											280M	569.5	488.5	800			1420	2x645	175			6-M20	188		1922	1608
300 x 250 CNHA	110	300	250	360	500	495	405	337	275	295	615	280M	569.5	488.5	800	636	295	1440	2x645	175	640	580	6-M20	189	4	1922	1804
	132											315S	589	517	1030			1480	2x700					216		1970	2061
	150											315M	614.5	552.5	1030			1550	2x725					221		2021	2066
300 x 200 CNJA	150	300	200	382	530	525	415	379	275	320	860	315M	614.5	552.5	1030	666	300	1750	2x700	175	640	580	6-M20	235	4	2083	2125
	185											315M	614.5	552.5	1070			1750	2x700					235		2083	2165
	220											315AB	666	830	1450			1910	2x740	215	700	640		270	5	2413	2580
	260											315CB	741	905	1660			2060	2x755	275				280		2563	2800
	300											315CB	741	905	1800			2060	2x755					280		2563	2940
300 x 200 CNKA	220	300	200	415	585	570	475	436	290	380	1070	315AB	666	830	1450	735	355	2030	3x560	175	790	720	8-M22	300	5	2501	2820
	260											315CB	741	905	1660			2180	3x610					315		2651	3045
	300											315CB	741	905	1800			2180	3x610					315		2651	3185
	335											315DB	841	1005	1900			2380	3x650	215		710		330		2851	3300
	370											355AB	779	970	2150	785		2240	3x630	175	840	760	8-M24	320		2754	3540
	450											400CB	990	1135	2500			2620	3x690	275	900	820		350		3130	3920

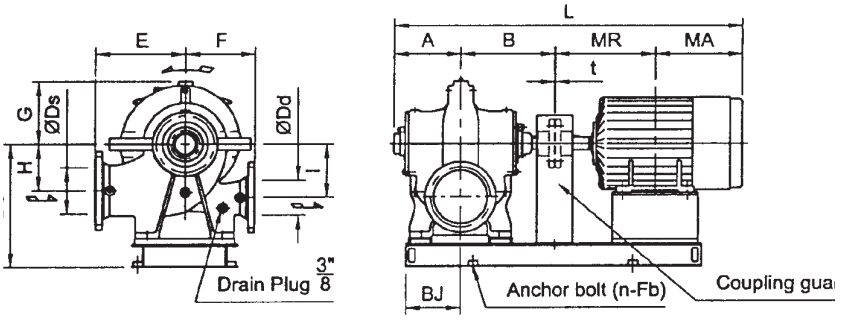
* Common base weight includes the shaft coupling and coupling gurd. All dimension shown are for reference only. Please refer to EBARA for actual fabrication details.

Unit : mm, unless otherwise stated

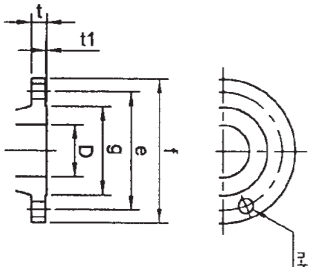
DIMENSION - CNA Pump with Motor 4-Poles Drive (6/6) 50Hz

Pump





Flange



Dimension - Flange

D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
250	430	380	345	2	34	12	27
300	480	430	395	3	36	16	27
350	540	480	440	3	38	16	33
400	605	540	495	3	42	16	33

Dimension - Pump

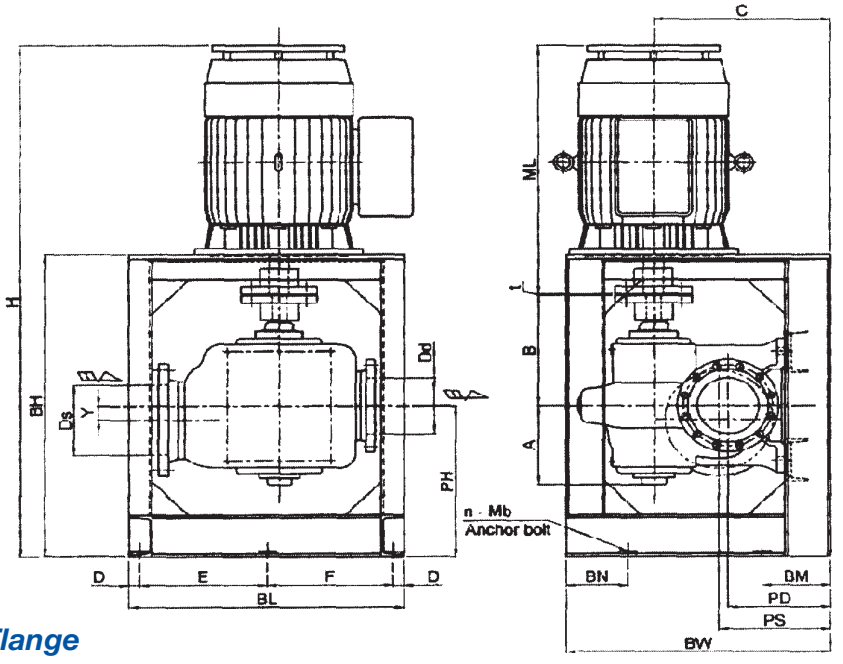
Model	Motor	Size		Pump								Motor				Common Base								Total		
	kW	Ds	Dd	A	B	E	F	G	H	I	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L	wt kg
350 x 300 CNFA	90	350	300	386	530	560	450	345	310	310	800	280S	544	463	700	775	355	1700	2x675	175	790	720	6-M22	250	4	1927	1750
	110											280M	569.85	488.5	800			1750	2x700	175				265		1978	1865
	132											315S	589	517	1030			1770	2x710	175				270		2026	2100
350 x 250 CNGA	132	350	250	386	530	560	450	350	310	303	790	315S	589	517	920	775	355	1770	2x710	175	790	720	6-M22	270	4	2026	1980
	150											315M	614.5	552.5	1030			1820	2x695	215				285		2087	2105
	185											315M	614.5	552.5	1070			1820	2x695	215				285		2087	2105
350 x 250 CNHA	185	350	250	414	560	560	440	373	315	330	845	315M	614.5	552.5	1070	775	355	1850	2x710	215	790	720	6-M22	290	4	2145	2205
	220											315AB	666	830	1450			200	2x710	275				315	5	2474	2610
	260											315CB	741	905	1660			2150	3x600	175			8-M22	335		2624	2840
	300											315CB	741	905	1800			2150	3x600	175				335		2624	2980
	335											315DB	841	1005	1900			2350	3x640	215				350		2824	3095
400 x 350 CNEA	90	400	350	451	600	570	470	355	320	320	1030	280S	544	463	700	805	390	1810	2x730	175	790	720	8-M22	275	4	2062	2005
	110											280M	569.5	488.5	800			1860	2x715	215				285		2113	2115
	132											315S	589	517	1030			1870	2x720	215				285		2161	2345
	150											315M	614.5	552.5	1030			1920	2x745	215				295		2222	2365
400 x 350 CNFA	150	400	350	439	585	625	510	385	305	344	1035	315M	614.5	562.5	1030	805	390	1910	2x740	215	790	720	6-M22	295	4	2195	2360
	185											315M	614.5	552.5	1070			1910	2x740	215				295		2195	2400
	220											315AB	666	830	1450			2050	2x750	275				315	5	2524	2800

* Common base weight includes the shaft coupling and coupling gurd. All dimension shown are for reference only. Please refer to EBARA for actual fabrication details.

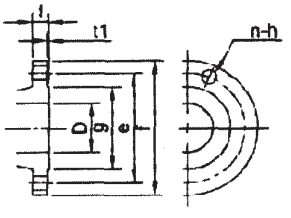
Unit : mm, unless otherwise stated

DIMENSION - CSA Pump with Motor 4-Poles Drive (Vertical Mount) 50Hz

Pump



Flange



Dimension - Flange

D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
80	200	160	135	2	24	8	23
100	225	185	160	2	26	8	23
125	270	225	195	2	26	8	25

Dimension - Pump

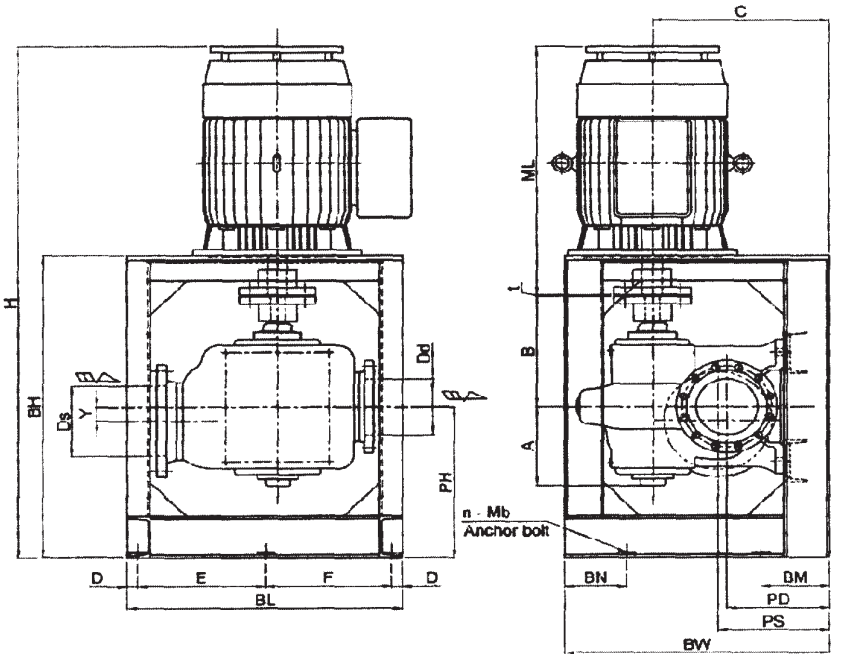
Model	Motor	Size		Pump						Motor			Common Base								Total							
	kW	Ds	Dd	A	B	E	F	Y	wt kg	Frame	ML	wt kg	BC	BL	BW	BH	BM	BN	n-Mb	wt kg	t	C	D	H	PD	PH	PS	wt kg
100 x 80 CSGA	2.2	100	80	221	250	270	240	70	143	100LD	363	35	650	700	561	793	150	100	6-M16	62.7	3	411	95	1105	271	437	271	240
	3.7									112MD	422	48								62.7				1161				254
100 x 80 CSHA	3.7	100	80	221	250	280	220	70	165	112MD	422	48	640	690	586	753	150	100	6-M16	62.7	3	411	95	1121	251	437	261	276
	5.5									132SD	446	70				773				73.5				1144				309
	7.5									132MD	484	80								73.5				1182				319
100 x 80 CSJA	5.5	100	80	221	250	280	230	70	200	132SD	446	70	650	700	611	773	150	150	6-M16	62.1	3	411	95	1144	231	437	251	332
	7.5									132MD	484	80								62.1				1182				342
	11									160MD	604	128				803				65.2				1298				393
125 x 100 CSJA	5.5	125	247	325	350	280	230	70	200	160LD	648	166	760	820	741	951	2000	150	6-M20	75.4	3	516	95	1490	286	510	316	521
	18.5									180MCD	667	173								75.4				1510				528
	22									180LCD	705	213								75.4				1548				568
	30									200LCD	768	290								75.4	4			1608				645

* Common base weight includes the shaft coupling and coupling gurd. All dimension shown are for reference only. Please refer to EBARA for actual fabrication details.

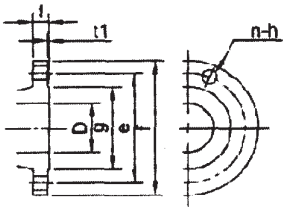
Unit : mm, unless otherwise stated

DIMENSION - CNA Pump with Motor 4-Poles Drive (Vertical Mount) (1/6) 50Hz

Pump



Flange



Dimension - Flange

D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
80	200	160	135	2	24	8	23
100	225	185	160	2	26	8	23
125	270	225	195	2	26	8	25
150	305	260	230	2	28	12	25

Dimension - Pump

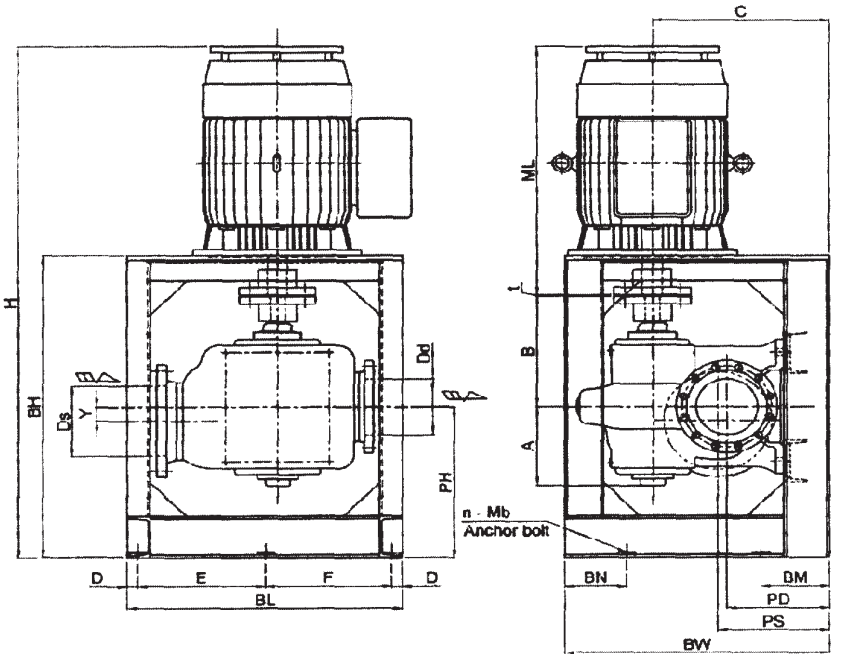
Model	Motor	Size		Pump					Motor			Common Base								Total							
	kW	Ds	Dd	A	B	E	F	wt kg	Frame	ML	wt kg	BC	BL	BW	BH	BM	BN	n-Mb	wt kg	t	C	D	H	PD	PH	PS	wt kg
125 x 100 CNGA	3.7	125	100	231	350	290	250	209	112MD	431	48	680	730	586	869	150	100	6-M16	68	3	411	95	1237	261	453	261	325
	5.5								132SD	454	70				889				69				1260				348
	7.5								132MD	492	80												1298				358
125 x 100 CNHA	7.5	125	100	231	350	300	250	242	132MD	492	80	690	740	611	889	150	150	6-M16	69	3	411	95	1298	251	453	261	391
	11								180MD	608	128				919				71				1414				441
125 x 80 CNJA	11	125	80	231	350	330	250	250	160MD	608	128	720	770	611	919	150	150	6-M20	72	3	411	95	1414	221	453	261	450
	15								160LD	652	166												1458				488
	18.5								180MCD	672	173												1478				495
150 x 150 CNFA	7.5	150	150	262	370	330	290	253	132MD	492	80	760	810	671	956	200	150	6-M16	75	3	471	95	1366	301	500	291	408
	11								160MD	608	128				986				77				1481				458
150 x 125 CNGA	11	150	125	262	395	330	260	275	160MD	608	128	720	780	695	1045	200	150	6-M20	76	3	496	95	1540	306	534	306	479
	15								160LD	652	166												1584				517
	18.5								180MCD	672	173												1604				524
150 x 125 CNHA	18.5	150	125	262	370	350	280	270	180MCD	672	173	760	820	721	1011	200	150	6-M20	77	3	496	95	1570	286	525	306	520
	22								180LCD	710	213												1608				560
	30								200LCD	770	290									4			1668				637
150 x 100 CNJA	30	150	100	271	395	380	290	330	200LCD	770	290	800	860	781	1046	200	200	6-M20	81	4	531	95	1703	291	534	3-41	701
	37								225SCD	816	335				1076				83				1749				748
	45								225MCD	841	378												1774				791

* Common base weight includes the shaft coupling and coupling gurd. All dimension shown are for reference only. Please refer to EBARA for actual fabrication details.

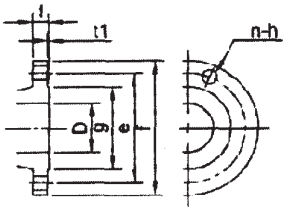
Unit : mm, unless otherwise stated

DIMENSION - CNA Pump with Motor 4-Poles Drive (Vertical Mount) (2/6) 50Hz

Pump



Flange



Dimension - Flange

D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
100	225	185	160	2	26	8	23
150	305	260	230	2	28	12	25
200	350	305	275	2	30	12	25

Dimension - Pump

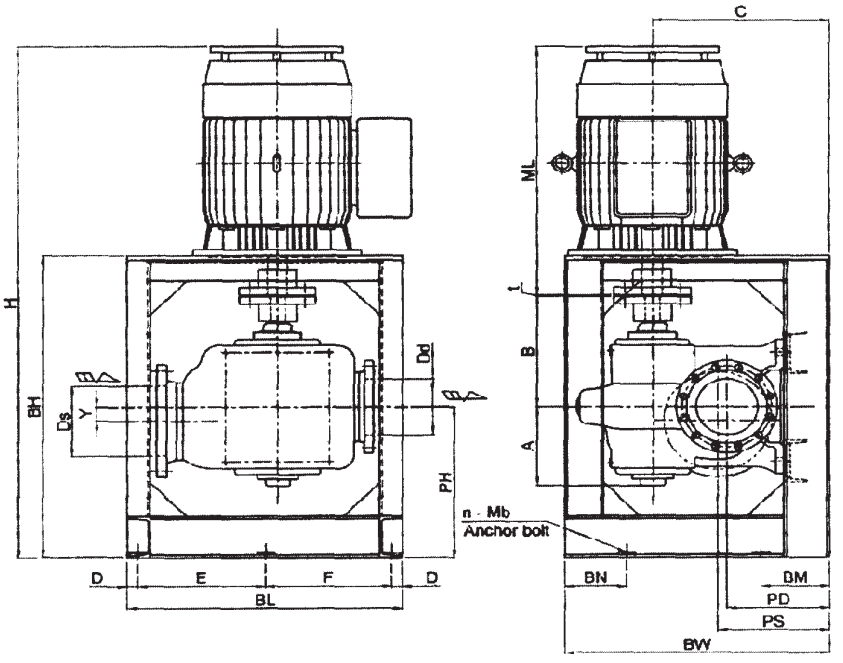
Model	Motor	Size		Pump					Motor			Common Base								Total							
	kW	Ds	Dd	A	B	E	F	wt kg	Frame	ML	wt kg	BC	BL	BW	BH	BM	BN	n-Mb	wt kg	t	C	D	H	PD	PH	PS	wt kg
200 x 200 CNEA	7.5	200	200	263	370	355	300	270	132MD	492	80	785	845	716	974	200	150	6-M20	81	3	516	95	1383	326	518	326	431
	11								160MD	608	128				1004				83				1499				481
	15								160LD	652	166												1543				519
200 x 150 CNFA	15	200	150	263	370	355	285	280	160LD	652	166	770	830	716	1004	200	150	6-M20	78	3	516	95	1543	326	518	326	524
	18.5								180MCD	672	173												1563				453
200 x 150 CNGA	18.5	200	150	263	370	355	285	310	180MCD	672	173	770	830	766	1004	200	200	6-M20	78	3	516	95	1563	306	518	316	561
	22								180LCD	710	213												1601				601
	30								200LCD	770	290												1661				678
	37								225SCD	816	335				1034				79				1707				724
200 x 150 CNHA	30	200	150	282	395	375	295	355	200LCD	770	290	800	860	831	1054	200	200	6-M20	82	4	531	95	1711	301	542	331	727
	37								225SCD	816	335												1757				773
	45								225MCD	841	378				1084				83				1782				816
	55								250SCD	882.5	540												1824				978
200 x 100 CNJA	45	200	100	305	450	420	335	445	225MCD	841	378	935	1005	915	1207	250	200	6-M22	90	4	615	125	1905	345	610	415	913
	55								250SCD	882.5	540												1947				1075
	75								250MCD	920.5	600												1985				1135
	90								280SCD	1022	720				1237				100				2086				1265

* Common base weight includes the shaft coupling and coupling gurd. All dimension shown are for reference only. Please refer to EBARA for actual fabrication details.

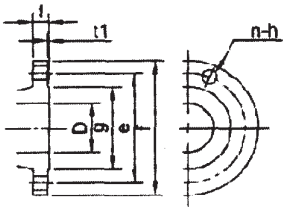
Unit : mm, unless otherwise stated

DIMENSION - CNA Pump with Motor 4-Poles Drive (Vertical Mount) (3/6) 50Hz

Pump



Flange



Dimension - Flange

D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
150	305	260	230	2	28	12	25
200	350	305	275	2	3	12	25
250	430	380	345	2	34	12	27

Dimension - Pump

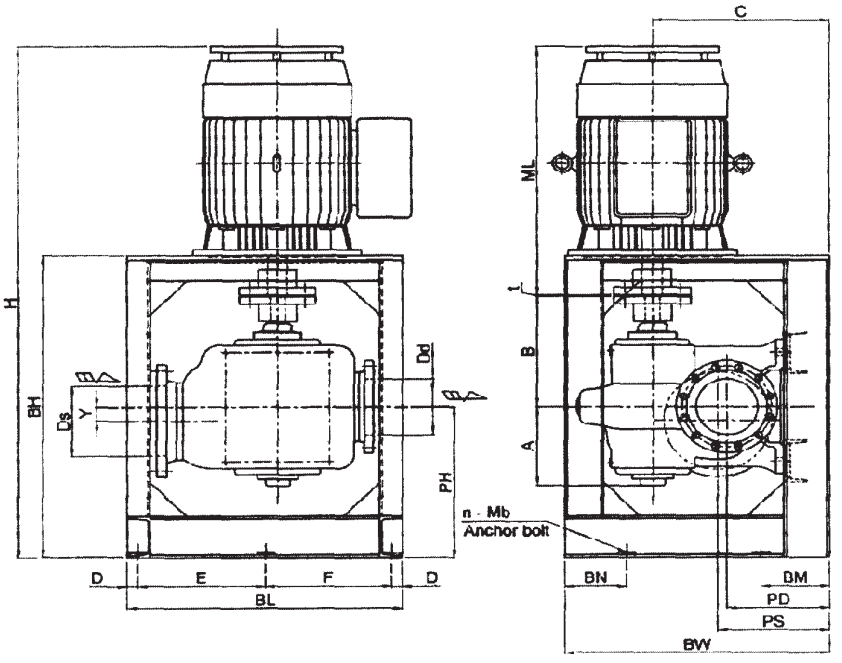
Model	Motor	Size		Pump					Motor			Common Base								Total							
	kW	Ds	Dd	A	B	E	F	wt kg	Frame	ML	wt kg	BC	BL	BW	BH	BM	BN	n-Mb	wt kg	t	C	D	H	PD	PH	PS	wt kg
250 x 200 CNEA	15	250	200	273	395	395	315	360	160LD	552	166	900	960	770	1039	200	200	6-M20	83	3	570	125	1578	360	528	360	609
	18.5								180MCD	672	173												1598				533
	22								180LCD	710	213												1636				573
250 x 200 CNFA	22	250	200	282	395	395	315	380	180LCD	710	213	900	960	820	1053	200	200	6-M20	85	3	570	125	1650	360	542	360	678
	30								200LCD	770	290									4			1710				670
	37								225SCD	816	335				1083				86				1756				801
250 x 150 CNGA	37	250	150	282	395	395	315	415	225SCD	816	335	900	960	890	1084	200	200	6-M20	87	4	590	125	1757	350	542	370	837
	45								225MCD	841	378												1782				880
	55								250SCD	882.5	540												1824				955
250 x 150 CNHA	55	250	150	315	450	430	325	500	250SCD	882.5	540	935	1005	915	1217	250	200	6-M22	149	4	615	125	1957	355	620	395	1189
	75								250MCD	920.5	600												1995				1249
	90								280SCD	1022	720				1247				151				2095				1371
200 x 150 CNJA	75	250	150	350	500	470	355	605	250MCD	920.5	600	1005	1075	1020	1322	250	200	6-M22	160	4	665	125	2100	365	675	445	1365
	90								260SCD	1022	720												2201				1487
	110								260MCD	1072	820				1352				162				2251				1587
	132								315SCD	1116	1050												2295				1817
	150								315MCD	1167	1250												2346				2017
250 x 150 CNKA	110	250	150	382	530	505	430	835	280MCD	1072	820																
	132								315SCD	1116	1050																
	150								315MCD	1167	1250																
	185								315MCD	1167	1250																
	220																										

* Common base weight includes the shaft coupling and coupling gurd. All dimension shown are for reference only. Please refer to EBARA for actual fabrication details.

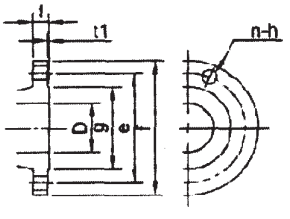
Unit : mm, unless otherwise stated

DIMENSION - CNA Pump with Motor 4-Poles Drive (Vertical Mount) (4/6) 50Hz

Pump



Flange



Dimension - Flange

D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
150	305	260	230	2	28	12	25
200	350	305	275	2	30	12	25
250	430	380	345	2	34	12	27
300	480	430	395	3	36	16	27

Dimension - Pump

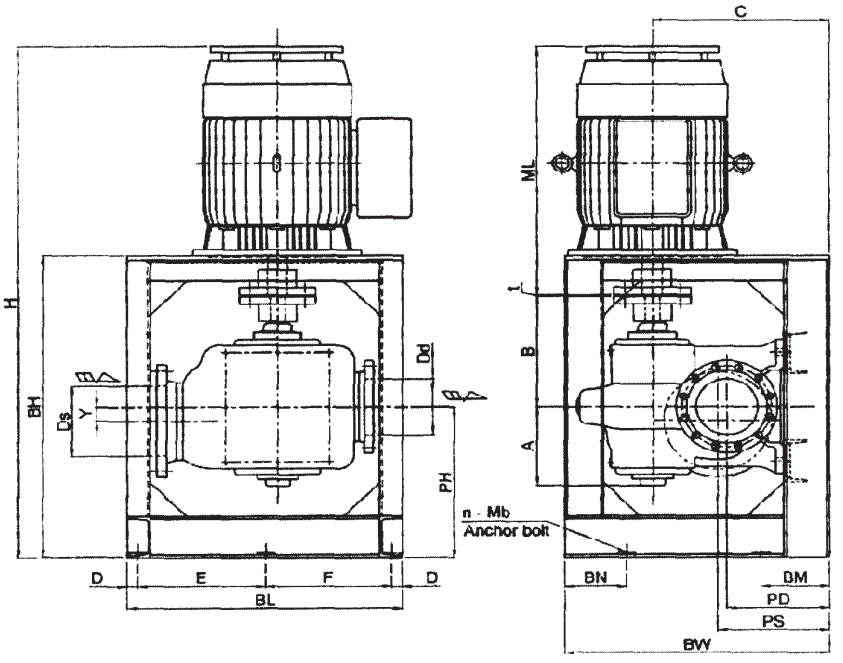
Model	Motor	Size		Pump					Motor			Common Base								Total							
	kW	Ds	Dd	A	B	E	F	wt kg	Frame	ML	wt kg	BC	BL	BW	BH	BM	BN	n-Mb	wt kg	t	C	D	H	PD	PH	PS	wt kg
300 x 250 CNEA	22	300	250	302	415	445	355	435	180LCD	710	213	980	1050	895	1119	225	200	6-M33	146	4	465	125	1716	410	587	410	794
	30								200LCD	770	290												1776				725
	37								225SCD	815	335				1149				149				1822				919
300 x 200 CNFA	37	300	200	315	450	445	355	490	225SCD	816	335	980	1050	945	1217	225	200	6-M22	151	4	645	125	1890	410	620	410	976
	45								225MCD	841	378												1915				1019
	55								250SCD	882.5	540												1957				1030
300 x 200 CNGA	55	300	200	315	470	445	355	520	250SCD	882.5	540	980	1050	965	1237	225	200	6-M22	154	4	665	125	1977	395	620	415	1214
	75								250MCD	920.5	600												2015				1274
	90								280SCD	1022	720				1267				156				2116				1396
300 x 200 CNHA	90	300	200	350	500	465	365	625	280SCD	1022	720	1010	1080	1020	1352	225	200	6-M22	162	4	665	125	2201	375	675	415	1507
	110								280MCD	1072	820												2251				1446
	132								315SCD	1116	1050								163				2295				1838
	150								315MCD	1167	1250												2346				2038
300 x 150 CNJA	150	300	150	382	530	520	405	785	315MCD	1167	1250																
	185								315MCD	1167	1250																
	220																										
	260																										
	300																										

* Common base weight includes the shaft coupling and coupling gurd. All dimension shown are for reference only. Please refer to EBARA for actual fabrication details.

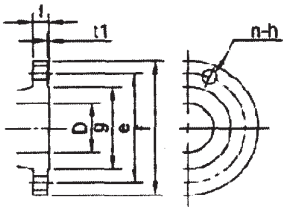
Unit : mm, unless otherwise stated

DIMENSION - CNA Pump with Motor 4-Poles Drive (Vertical Mount) (5/6) 50Hz

Pump



Flange



Dimension - Flange

D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
200	350	305	275	2	30	12	25
250	430	380	345	2	34	12	27
300	480	430	395	3	36	16	27

Dimension - Pump

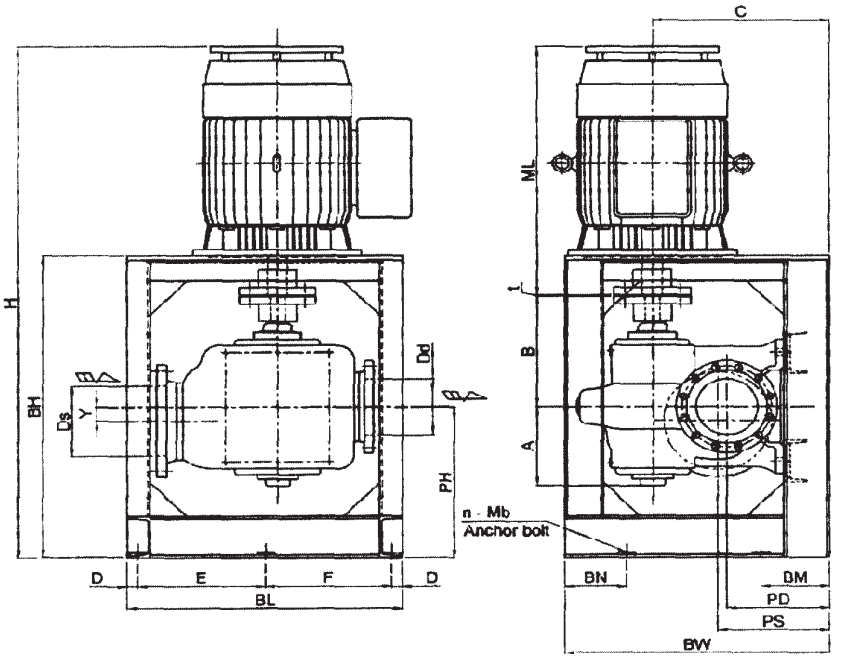
Model	Motor	Size		Pump					Motor			Common Base								Total							
	kW	Ds	Dd	A	B	E	F	wt kg	Frame	ML	wt kg	BC	BL	BW	BH	BM	BN	n-Mb	wt kg	t	C	D	H	PD	PH	PS	wt kg
300 x 250 CNFA	37	300	250	325	470	495	405	570	225SCD	816	335	1080	1150	965	1257	225	200	6-M22	162	4	665	125	1930	405	640	415	945
	45								225MCD	841	378												1955				860
	55								250SCD	882.5	540												1997				732
	75								250MCD	920.5	540												2035				905
300 x 250 CNGA	75	300	250	360	500	495	405	620	250MCD	920.5	600	1080	1150	965	1332	225	200	6-M22	164	4	665	125	2110	405	685	415	1119
	90								280SCD	1022	720				1362				166				2211				1164
	110								280MCD	1072	720												2261				1160
300 x 250 CNHA	110	300	250	360	500	495	405	615	280MCD	1072	820	1080	1150	1045	1362	225	200	6-M22	166	4	690	125	2261	395	685	415	1321
	132								315SCD	1116	1050												2305				1381
	150								315MCD	1167	1250												2305				1335
300 x 200 CNJA	150	300	200	382	530	525	415	860	315MCD	1167	1250																
	185								315MCD	1167	1250																
	220																										
	260																										
	300																										
300 x 200 CNKA	220	300	200	415	585	570	475	1070																			
	260																										
	300																										
	335																										
	370																										
	450																										

* Common base weight includes the shaft coupling and coupling gurd. All dimension shown are for reference only. Please refer to EBARA for actual fabrication details.

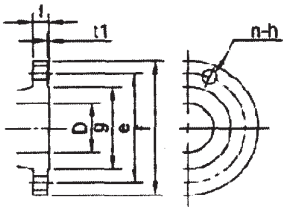
Unit : mm, unless otherwise stated

DIMENSION - CNA Pump with Motor 4-Poles Drive (Vertical Mount) (6/6) 50Hz

Pump



Flange



Dimension - Flange

D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
250	430	380	345	2	34	12	27
300	480	430	395	3	36	16	27
350	540	480	440	3	38	16	33
400	605	540	495	3	42	16	33

Dimension - Pump

Model	Motor	Size		Pump					Motor			Common Base								Total							
	kW	Ds	Dd	A	B	E	F	wt kg	Frame	ML	wt kg	BC	BL	BW	BH	BM	BN	n-Mb	wt kg	t	C	D	H	PD	PH	PS	wt kg
350 x 300 CNFA	75	350	300	386	530			800	250MCD	921	600																
	90								280SCD	1022	720																
	110								280MCD	1072	820																
250 x 250 CNGA	110	350	250	386	530			790	280MCD	1072	820																
	132								315SCD	1116	1050																
	150								315MCD	1167	1250																
	186								315MBD	1167	1250																
350 x 250 CNHA	185	350	250	414	560			845	315MBD	1167	1250																
	220																										
	260																										
	300																										
	335																										
400 x 350 CNEA	90	400	350	451	600			1030	280SCD	1022	720																
	110								280MCD	1072	820																
	132								315SCD	1116	1050																
	150								315MCD	1167	1250																
400 x 350 CNFA	150	400	350	439	585			1045	315MCD	1167	1250																
	185								315MBD	1167	1250																
	220																										

* Common base weight includes the shaft coupling and coupling gurd. All dimension shown are for reference only. Please refer to EBARA for actual fabrication details.

Unit : mm, unless otherwise stated