IMPPUMPS®

Intelligent Motor Pumps

www.imp-pumps.com

IN-LINE PUMPS

TECHNICAL DATA

Investing in your future
Operation Part Financed By The European Union
European Regional Development Fund

GENERAL INFORMATION

ALL PRODUCTS AND COMPONENTS ARE MANUFACTURED FROM ENVIRONMENTALLY FRIENDLY MATERIALS.

UPON DISPOSAL INTERNAL ENVIRONMENTAL REGULATION MUST BE CONSIDERED.

FURTHER INFORMATION ON ALL PUMPING PROGRAMS WITH TECHNICAL DATA ARE AVAILABLE ON WWW.IMP-PUMPS.COM

GENERAL SALES CONDITIONS AND TERMS OF PAYMENT – DEPENDING ON THE AGREEMENT WITH THE FIRM IMP PUMPS.

IMAGES IN CATALOGUE ARE FOR ILLUSTRATIVE PURPOSES ONLY.

TECHNICAL ADJUSTMENTS AND REVISIONS ARE NOT PERMITTED!

ABOUT US

IMP PUMPS is Slovenian manufacturer of pumps and pumping systems located in Komenda in Slovenia. Company designs, develops, manufactures, distributes and maintains pumps and pumping systems. With products and services of its own and from strategic partners, company is positioned as provider of integrated solutions. With specialized skills company resolves the problems relating to the transportation of liquid media. This ensures the comfort of home environment and optimal working conditions in the industry.
IMP PUMPS has increased its profit in the last three years by 60%. More than 96 % of production is sold in over 60 countries around the world. Company is innovator in the field of electro commutated submersible motors and has the quality certificate ISO 9001:2008.

HISTORY

IMP PUMPS was founded in 1947 and has existed as part of the IMP until the late1980s. Company successfully survived the change of the economic system and the turbulent nineties and stood on its own feet. Company was privatized in 1997 and 1999. In the year 2000, the company was restructured and renamed in IMP PUMPS d.o.o.. Slovenia's entry into the EU was another initiative for IMP PUMPS intensive development of the sales network in the changing European market, either directly or through its business partners.
At the same time investments in development, marketing, information technology, and philosophy of e-commerce were made.

PRESENT

IMP PUMPS is present with its products and services in many world markets (Eastern and Western Europe, North America, Asia, North Africa and Australia). IMP PUMPS is also a member of EUROPUMP the European Association of Pump Manufacturers. In pump design, high priority is given to the improvement of the energy efficiency of pumps. Excellent results have been reached by the new NMT pump series, using permanent magnets technology for very high efficiency rates.
IMP PUMPS is one of the few European manufacturers, which over the years developed and launched a new generation of pumps with electronically controlled wet running motors. This is one of the main reasons that the company IMP PUMPS is ranked among Europe's technological elite.
Reference: http://imp-pumps.com/en/reference/

FUTURE

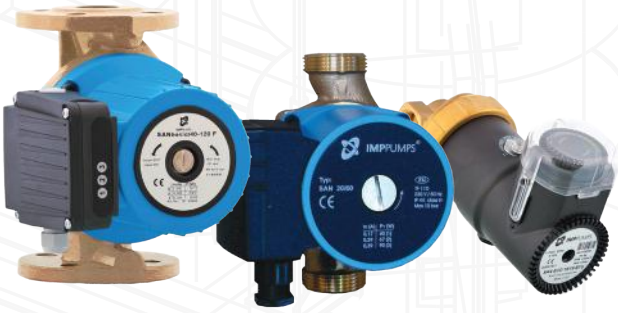
IMP PUMPS Company employees are aware they have become part of global development and the importance of the environment in which they live. Our products are energy efficient and environmentally friendly. We are constantly developing new and more cost effective pumps replacing the old types and investing in the development of intelligent pumps with an emphasis on digitization and communication. The company plans to further expand its sales on foreign markets and enhance its position among the four largest manufacturer of circulator pumps in Europe. In the spirit of its motto "The honest product for the honest price", IMP PUMPS intends to maintain the excellent quality of its products at the favorable prices for the customer, along with the application of the latest technologies and prompt service.

Product overview

The basic production program of IMP PUMPS are circulating pumps for HVAC application. Pumps are flanged or threaded and single or double design with a bronze or cast iron hydraulic casing. All cast iron hydraulics are covered with cataphoresis.

Wet running circulating pumps

NMT (electronic savings, ECM, SAN circulation for sanitary water)



SAN - for sanitary water

GHN (3-speed pumps)

Dry running circulating pump

CL, CV, PV, NR (in-line, bloc, with frequency converter)

(E)CL(D) - in-line pumps

(E)CL(D) 50 - 290 / 2 / 3.0 A / L - H - DTSR(2,5)

- Type of sensor
- Frequency converter type
- FC (integrated(I)/separated(L))
- Factory mark
- Power [kW]
- Number of poles
- Head [dcm]
- DN
- Type - (Electronic) CL (Duplex)

Construction

Close-coupled, single-impeller, centrifugal pums with standard electric motor and electric motor with extended shaft. Pump casing with suction and delivery connections with the same diameter and on the same axis (in-line).

Motor

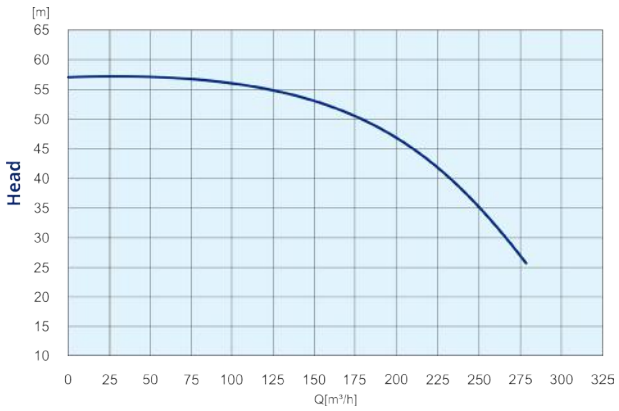
2 poles n ≈ 2900 rpm; 50Hz
4 poles n ≈ 1450 rpm; 50Hz

Three phase (depending on motor power);
230V/400V
400V/690V

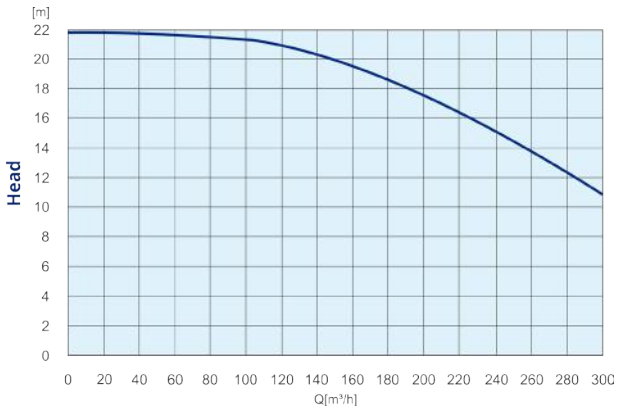
Technical specification of the motor	
Rated power	0,55kW - 37,0kW
Efficiency class	IE 3
Degree of protection	IP 55
Insulation class	F
MEI	MEI ≥ 0,40
ErP	ErP Standalone product
ATEX	in accordance

Peformance range

(E)CL(D) 2 poles ≈ 2900 rpm



(E)CL(D) 4 poles ≈ 1450 rpm



Technical data

TECHNICAL FEATURES	CL/ECL	CLD/ECLD
CONNECTIONS (DN)	40 TO 150	40 TO 100
CONNECTION TYPE	FLANGE	FLANGE
MAX OPERATING PRESSURE (PN)	10/16	10/16
AMBIENT TEMPERATURE	-30°C TO +60°C	-30°C TO +60°C
MEDIA TEMPERATURE	-25°C TO +130°C/+140°C	-25°C TO +130°C/+140°C
TWIN PUMP	NO	YES
APPLICATIONS	**CL/ECL**	**CLD/ECLD**
HEATING	YES	YES
COOLING	YES	YES
SANITARY WATER	NO	NO
CLIMATE APPLIANCES	YES	YES
INDUSTRY	YES	YES
PROCESS TECHNIQUE	YES	YES
CONDENSATION	YES	YES
SALT WATER	NO	NO
MATERIALS	**CL/ECL**	**CLD/ECLD**
HYDRAULIC CASING	CAST IRON	CAST IRON
IMPELLER	CAST IRON	CAST IRON
SHAFT	STAINLESS STEEL	STAINLESS STEEL
MECHANICAL SEAL STANDARD	BAQUE, 120°C	BAQUE, 120°C
MECHANICAL SEAL OPTIONAL	B, 140°C	B, 140°C

CL 2 poles - Q/H performance

CL 2 poles DN 40F

Code	Type	P [kW]	I [A]		Q [m³/h]													
					6	7,5	9	10,5	12	13,5	15	18	21	24	27	30	36	42
979525070	CL 40-170/2/0.75A	0,75	1,6	H [m]	15	14,5	13,5	13	11,8	10,5	9,5	6						
979523782	CL 40-220/2/1.1A	1,1	2,5		20,5	20	19	18	17	16	15	11,5	7,5					
979523783	CL 40-250/2/1.5A	1,5	3,4		24,5	24	23,5	23	22	21	20	16,5	13					
979523784	CL 40-290/2/2.2A	2,2	4,6		28,5	28	27,5	26,5	25,5	24	23	20	15					
979520868	CL 40-350/2/4.0	4	7,7		34	33	32	31,5	31	30	29	26,5	24	21	17,5	13,5		
979523786	CL 40-380/2/3.0A	3	5,6		36,5	36	35,5	35	34,5	33,5	32	30						
979522078	CL 40-430/2/5.5	5,5	10,6		44	43,5	43,5	43,3	43	42,5	42	41	39,5	38	37,5	35	30	24
979523787	CL 40-470/2/4.0A	4	8,2		47	46,5	46	45	44	43	42	39,5	37,5	34				
979522079	CL 40-530/2/7.5	7,5	14,1		53	52,7	52,3	51,8	51,5	51	50,5	49	48	46,5	45	42,7	38,5	35
979523789	CL 40-550/2/5.5A	5,5	10,2		55	54,5	54	53,5	53	52	51	48	45	42				
979520867	CL 40-600/2/5.5	5,5	10,6		59	58,9	57,9	57,4	56,5	56	55,5							
979523790	CL 40-625/2/7.5A	7,5	14,4		62	61,5	61	60	59	58	57	54	52,5	49				
979522080	CL 40-630/2/11.0	11	20,1		64,5	64,3	64	63,7	63,5	63	62,5	61,5	60,5	59	57,5	56	52,5	49
979523791	CL 40-680/2/7.5A	7,5	14,4		67,5	67	66	65	64,5	63	61,5	59	56					
979523792	CL 40-830/2/11.0A	11	19,9		82	81,5	81	80,5	79,5	78,5	77,5	74	71	66,5				
979523793	CL 40-920/2/15.0A	15	26,8		92	91,5	90,5	90	89	88,5	87,3	84,5	82	76				

CL 2 poles DN50F

Code	Type	P [kW]	I [A]		Q [m³/h]													
					12	13,5	15	18	21	24	27	30	36	42	48	54	60	75
979522031	CL 50-160/2/1.1	1,1	2,32	H [m]			12	11	10									
979523794	CL 50-170/2/1.5A	1,5	3,4				15,5	15	14,1	13	11,8	10,5	7					
979522030	CL 50-190/2/1.5	1,5	3,07				16,5	15,5	15	13,5								
979523795	CL 50-200/2/2.2A	2,2	4,6				19	18,5	17,5	16,5	15,5	14	10,5					
979522032	CL 50-240/2/2.2	2,2	4,43				21	20	19,5	17,8	16							
979525071	CL 50-250/2/3.0A	3	5,6				24,5	24	23,5	23	22	20,5	17					
979522033	CL 50-290/2/3.0	3	5,77				27,3	26,2	25,5	24,5	23	22						
979523796	CL 50-310/2/3.0A	3	5,6				29,5	28,5	27,5	26	25	23	18					
979522034	CL 50-360/2/4.0	4	7,5				34	33	32,4	32	30,5	29,5						
979523797	CL 50-370/2/4.0A	4	8,2				35,5	34,5	34	32,5	31,5	30	26					
979522036	CL 50-420/2/7.5	7,5	14,1				45	44,8	44	43,7	43	42,5	41	28	35	32		
979522035	CL 50-430/2/5.5	5,5	10,6				41	40,2	40	39	37	36	35,5	33				
979522037	CL 50-540/2/11.0	11	20,1				55,3	55	54,9	54,8	54	53,5	52	49,5	46	43		
979520870	CL 50-550/2/11.0	11	20,4				55	54,5	54	53,5	52	51	46	44,5	36			
979522038	CL 50-630/2/15.0	15	27,1				65	65	64,5	64	63,5	63	62	59	56	53		
979525073	CL 50-700/2/11.0A	11	19,9				69	67,5	67	65	62,5	60,5	55					
979525074	CL 50-780/2/15.0A	15	26,8				77	76	74,5	74	71	69,5	64,5	60				
979525075	CL 50-910/2/15.0A	15	26,8				89,5	89	88,5	87	85	83,5	78	71				

CL 2 poles DN65F

Code	Type	P [kW]	I [A]		Q [m³/h]													
					18	21	24	27	30	36	42	48	54	60	75	90	105	120
979522081	CL 65-170/2/2.2	2,2	4,43	H [m]			15,9	15,5	15,2	13,8	12,7	11						
979522082	CL 65-210/2/3.0	3	5,77				19,5	19,3	18,9	18,5	17	15,5	13,7					
979520875	CL 65-250/2/5.5	5,5	10,6				23	22,5	22	21,5	20,5	19	18	17,5				
979522083	CL 65-260/2/4.0A	4	7,5				25,5	25,3	25	24	23	21,5	20	18				
979522084	CL 65-340/2/5.5	5,5	10,6				33	32,5	32	31	29,5	28,5	26,5					
979520874	CL 65-350/2/7.5	7,5	14,1				34	33,5	33	32	31	29	28	26,5				
979523001	CL 65-370/2/7.5A	7,5	14,4				37	36,5	36	35	34	32,5	31	29				
979522085	CL 65-410/2/7.5	7,5	14,1				40	39,9	39,5	39	38	36,5	34,5	32				
979523804	CL 65-520/2/11.0A	11	19,9				50,5	50	49,5	47	45	43	40	36				
979520873	CL 65-550/2/15.0	15	27,6				54	53,5	53	52	50	48	45	42,5	36			
979525078	CL 65-810/2/18.5A	18,5	33				80	79	78,5	77,5	75,5	72,3	70,5	67,5				
979525079	CL 65-910/2/22.0A	22	39,4				90,5	90	89,5	88,5	86,5	83	81					

CL 2 poles DN80F

Code	Type	P [kW]	I [A]		Q [m³/h]													
					30	36	42	48	54	60	75	90	105	120	135	150	165	180
979522060	CL 80-180/2/3.0	3	5,77	H [m]			15	14	13	12								
979522061	CL 80-210/2/4.0	4	7,5				18,3	17,5	16,8	16								
979522062	CL 80-240/2/5.5	5,5	10,6				23	22,5	22	21,5	18							
979522063	CL 80-250/2/7.5	7,5	14,1				26	26	25	24,5	22,5	20,5						
979522064	CL 80-330/2/11.0	11	20,1				31	30,7	30,5	30	29,5	28	26,5	23,5				
979522065	CL 80-400/2/15.0	15	27,1				39,5	39	39	38,5	38	37	36	35	33,5			
979523647	CL 80-420/2/15.0A	15	26,8				41	40,5	40	39,5	38	35,5	33	29	24			
979524489	CL 80-440/2/15.0A	15	26,8					44	43,5	43	41,5	39	35,5	31,5				
979525082	CL 80-510/2/18.5A	18,5	33					51	50	49,5	48,5	46,5	43,5	39,5	35			
979525083	CL 80-570/2/22.0A	22	39,4					57	56,5	56	55	53,5	51	48	42,5			
979520876	CL 80-600/2/22.0	22	39,1				58,5	58	57	56,5	54	52	47,5	44	40			
979525084	CL 80-650/2/22.0A	22	39,4				64,5	64,3	64	63	61	57	53					
979525085	CL 80-780/2/30.0A	30	52,1				77,5	77	76,5	76	74	70	66	59	52			
979525086	CL 80-850/2/37.0A	37	62,6				84,5	84	83,5	82,5	79	76	70	64,5				

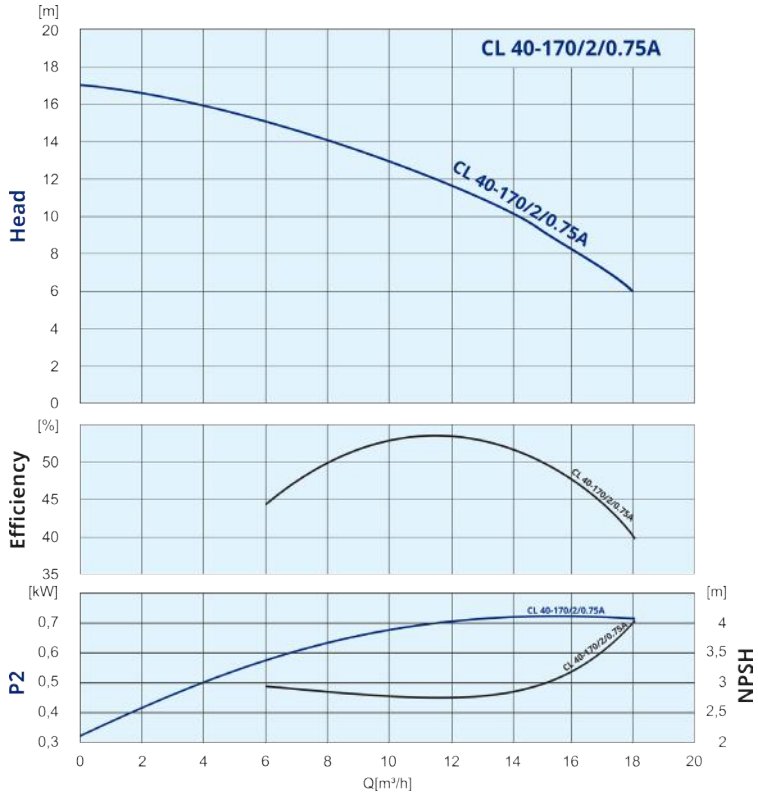
CL 2 poles DN100F

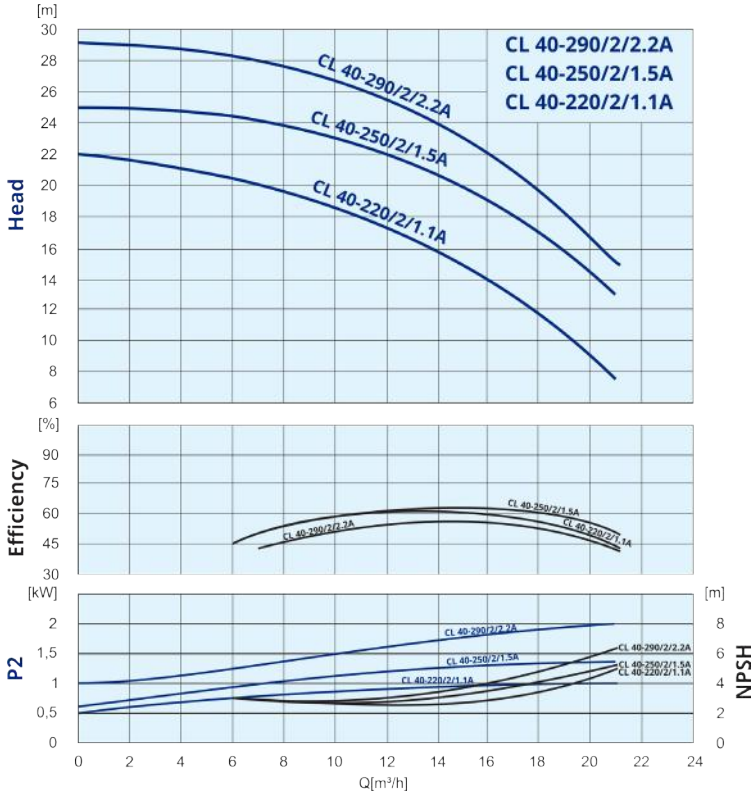
Code	Type	P [kW]	I [A]		Q [m³/h]													
					48	54	60	75	90	105	120	135	150	165	180	195	210	225
979525087	CL 100-250/2/11.0A	11	19,9	H [m]			24	23	22	21	19,5	18	16,5	15				
979525088	CL 100-290/2/15.0A	15	26,8				28,5	28	27	26	24,5	23	21,5	20	18,5			
979525089	CL 100-340/2/15.0A	15	26,8				33,5	32,5	31,5	29	26,5	24,5	21,5	19,5				
979525090	CL 100-390/2/15.0A	15	26,8				38,5	37,5	36,5	35	33	31	28,5	26				
979525091	CL 100-420/2/18,5A	18,5	33				42	41	40	38,5	37	35	33	30,5	38			
979525092	CL 100-470/2/22.0A	22	39,4				47	46,5	45,5	33,5	43	41	39	37	34			
979525093	CL 100-560/2/30.0A	30	52,1				55	54	53	52	51	49	47	45	43	40	37	
979525094	CL 100-570/2/37.0A	37	62,6				57	56,8	56,5	56	55	54	52,5	51	48	45	42	
979525095	CL 100-680/2/37.0A	37	62,6					68	67	66	65	63	61	58	55	51	47	

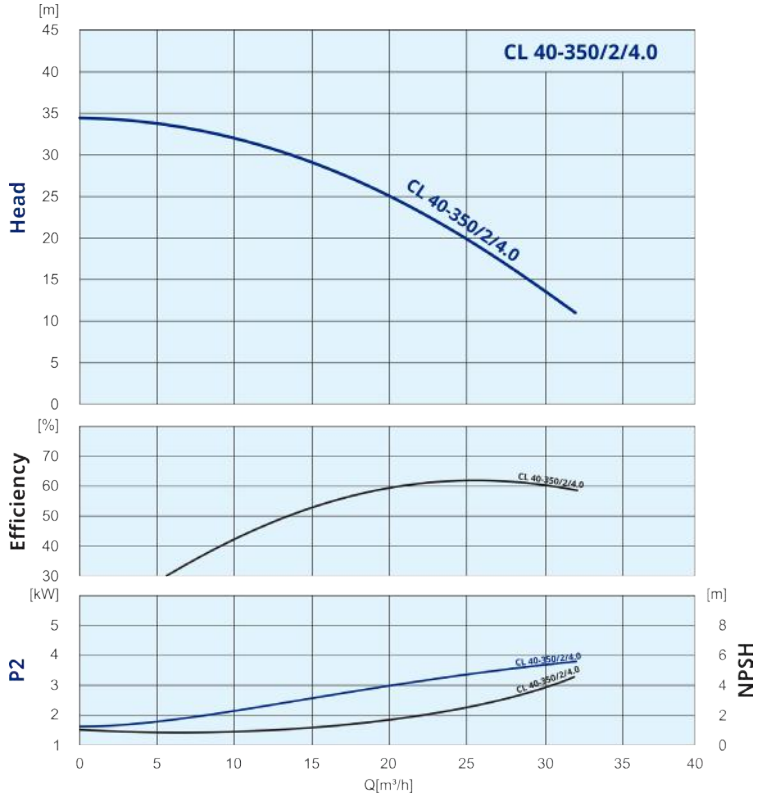
CL 2 poles DN125F

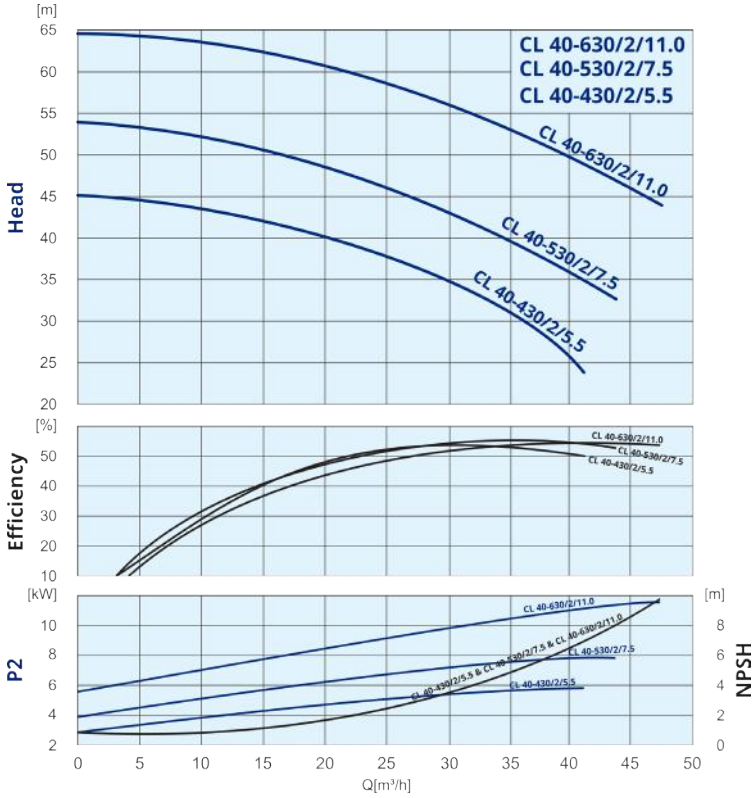
Code	Type	P [kW]	I [A]		Q [m³/h]													
					54	60	75	90	105	120	135	150	165	180	195	210	225	240
979525096	CL 125-470/2/30.0A	30	52,1	H [m]					45	44	43	41	38	35,5	32,5	30	26	22
979525097	CL 125-570/2/37.0A	37	62,6						56	55	54	53	52	49,5	47	45,5	42	37,5

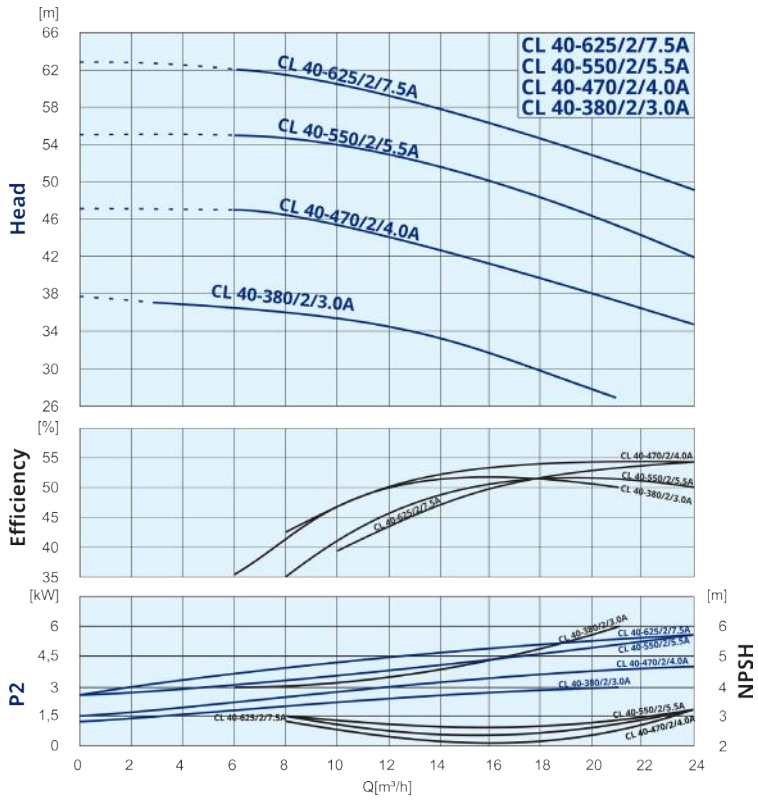
CL 2 poles - Performance curves







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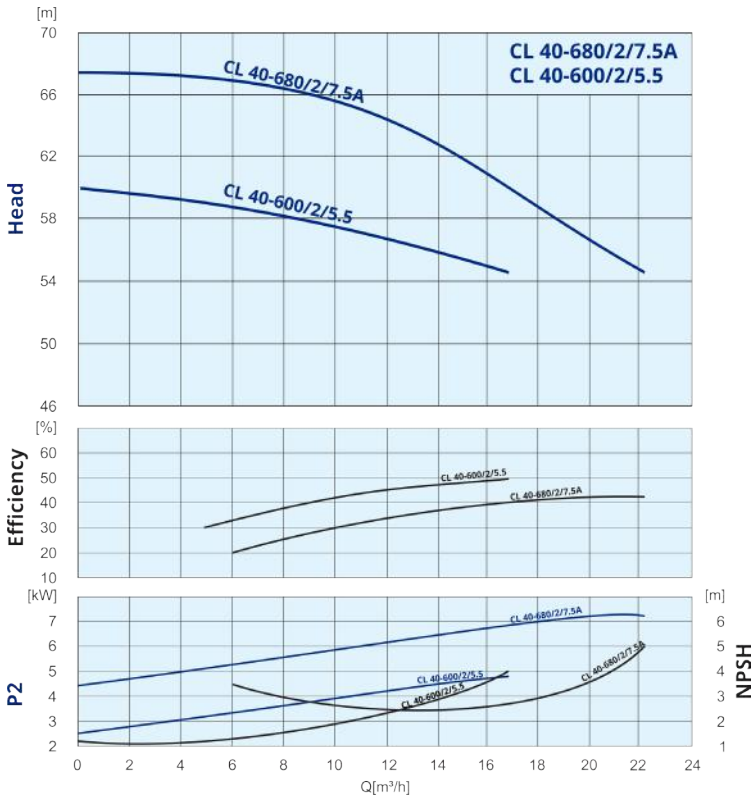
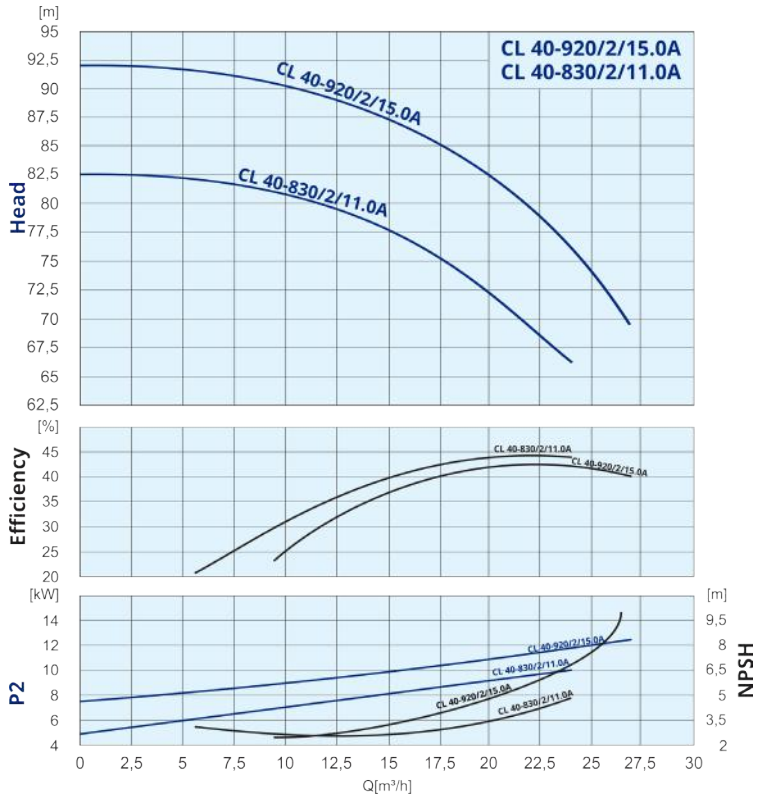
CL 40-550/2/5.5A
CL 40-470/2/4.0A
CL 40-380/2/3.0A
Head
Efficiency
P2
NPSH
Q[m³/h]


CL 40-680/2/7.5A
CL 40-600/2/5.5
Head
Efficiency
P2
NPSH
Q[m³/h]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Head
Efficiency
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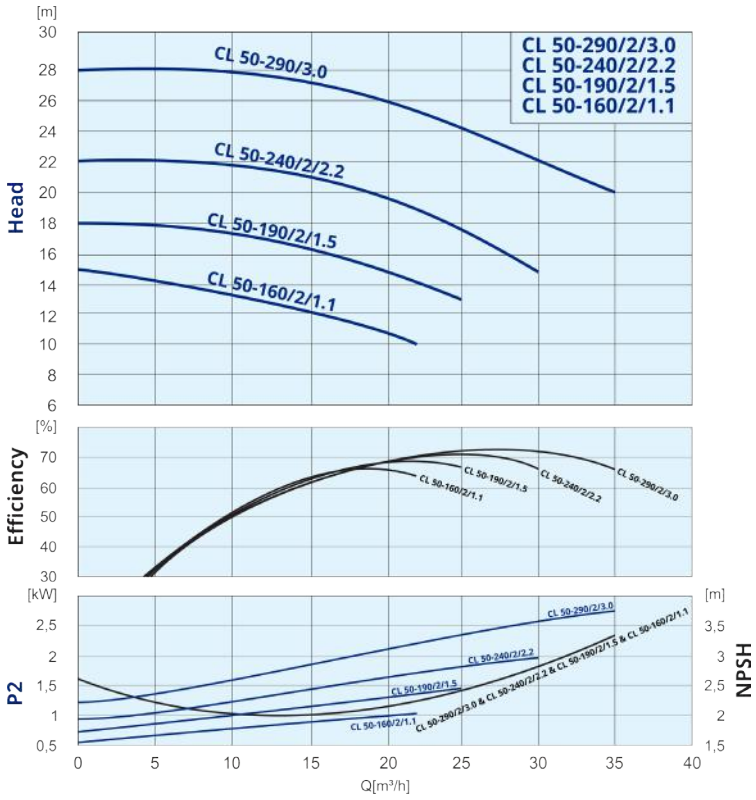
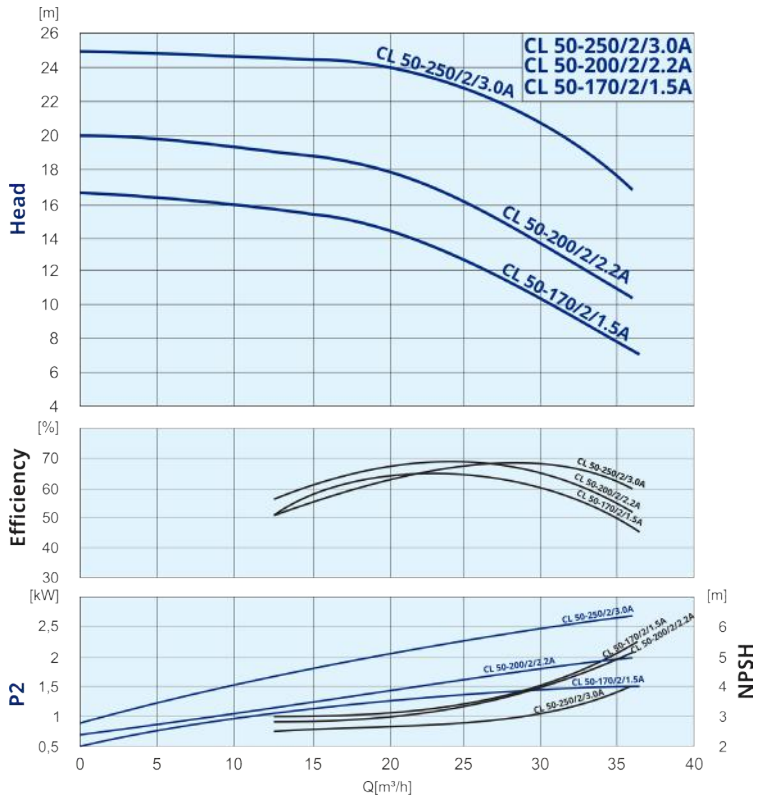
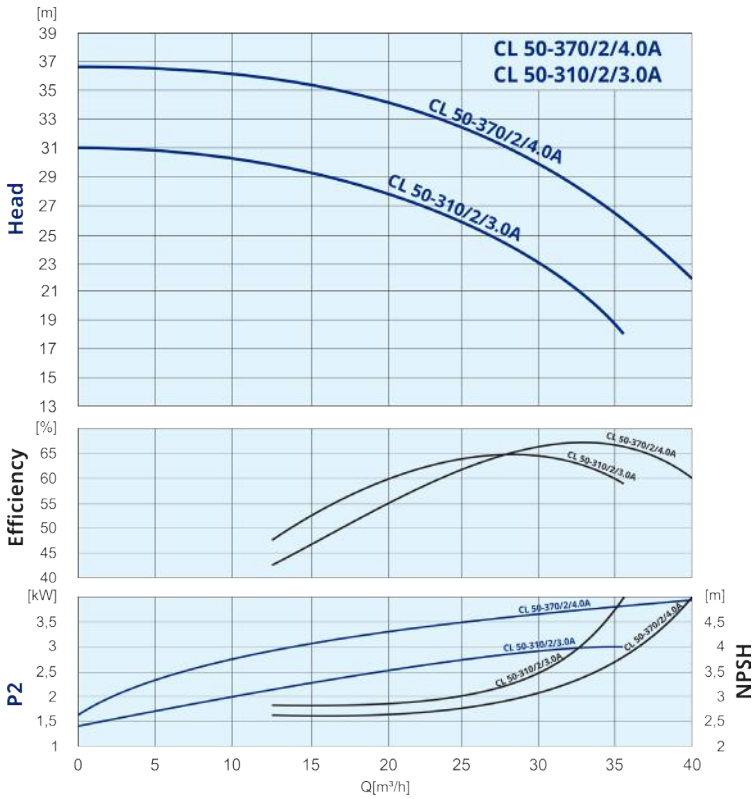
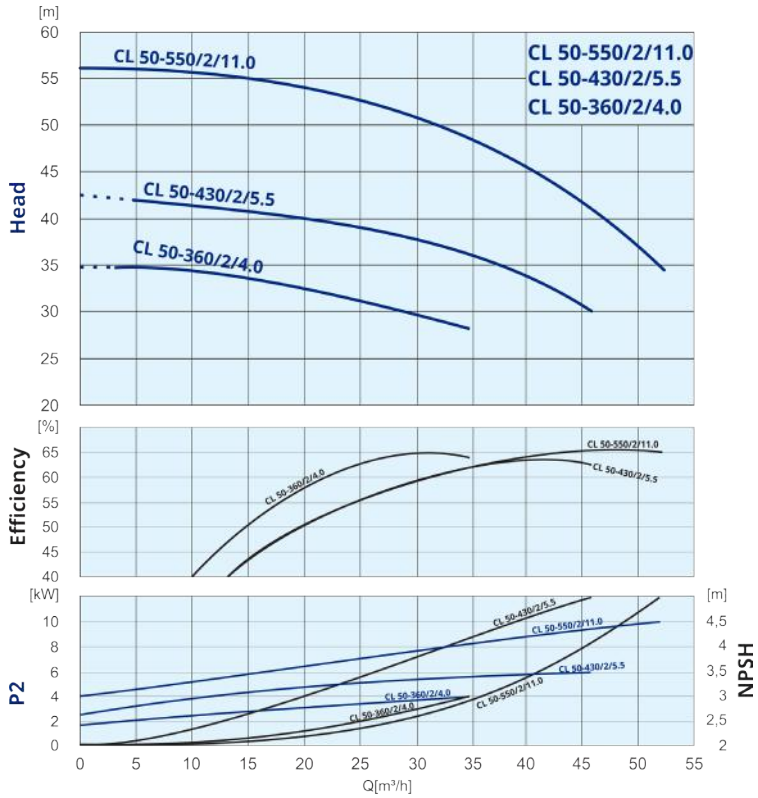
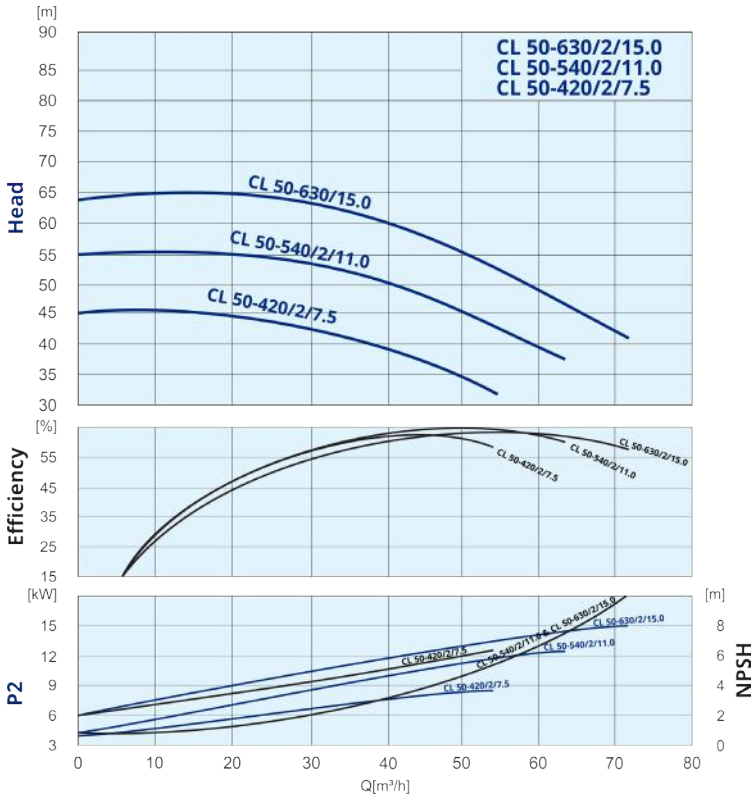
NPSH
Q[m³/h]

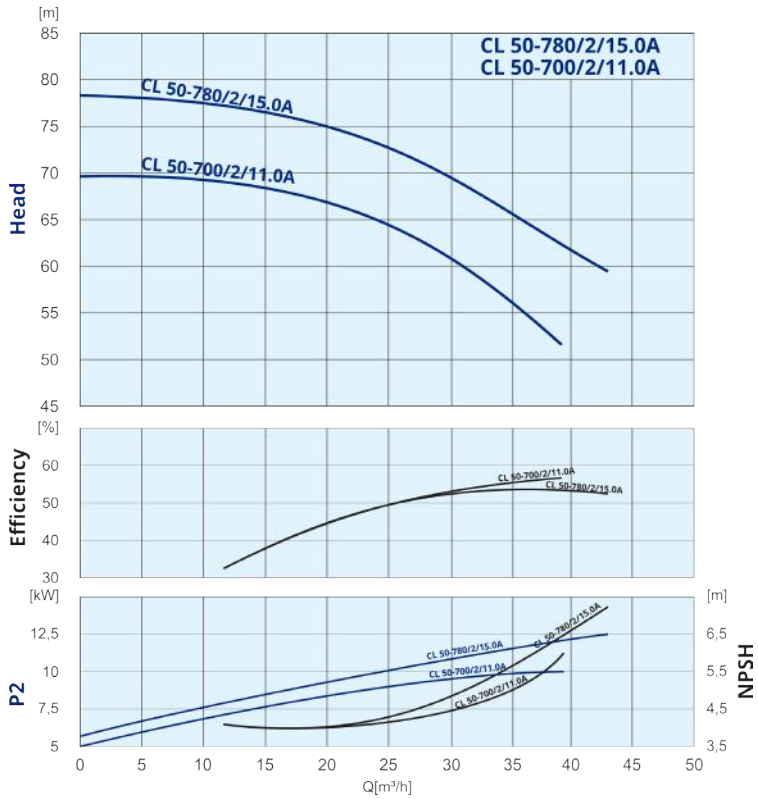

CL 50-290/2/3.0
CL 50-240/2/2.2
CL 50-190/2/1.5
CL 50-160/2/1.1
Head
Efficiency
P2
NPSH
Q[m³/h]

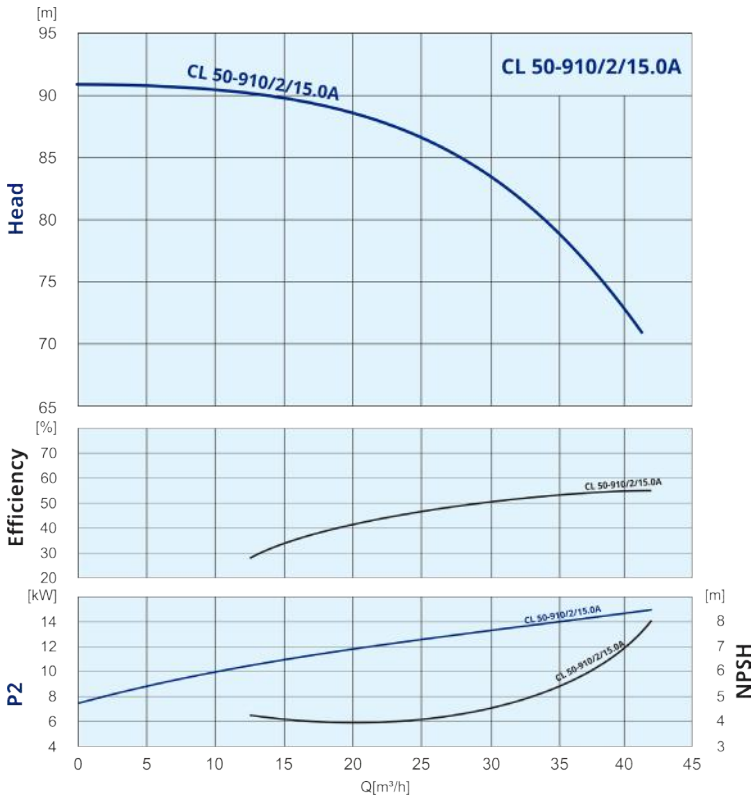

CL 50-250/2/3.0A
CL 50-200/2/2.2A
CL 50-170/2/1.5A
Head
Efficiency
P2
NPSH
Q[m³/h]

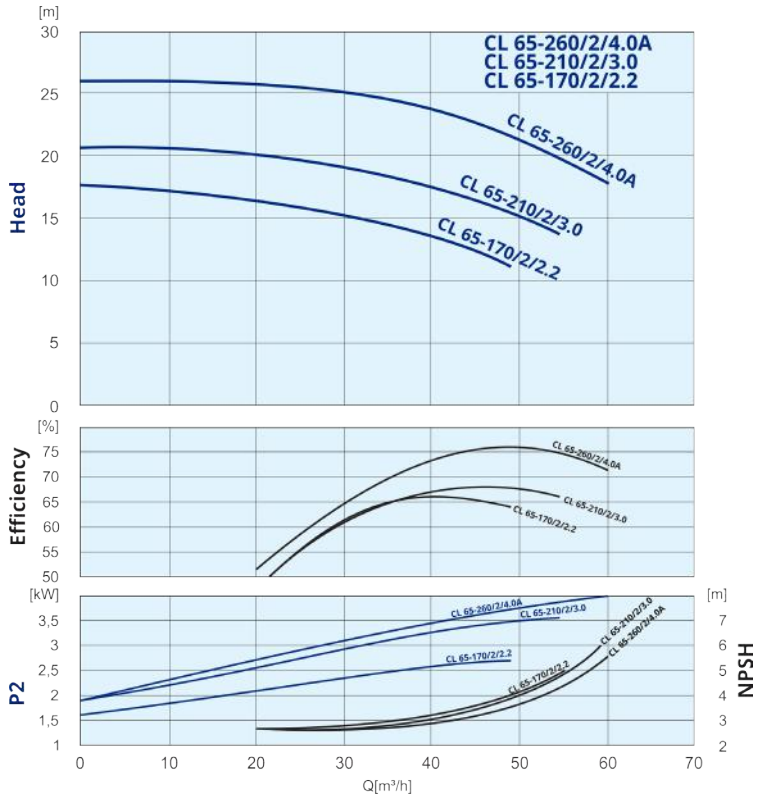

CL 50-370/2/4.0A
CL 50-310/2/3.0A
Head
Efficiency
P2
NPSH
Q[m³/h]

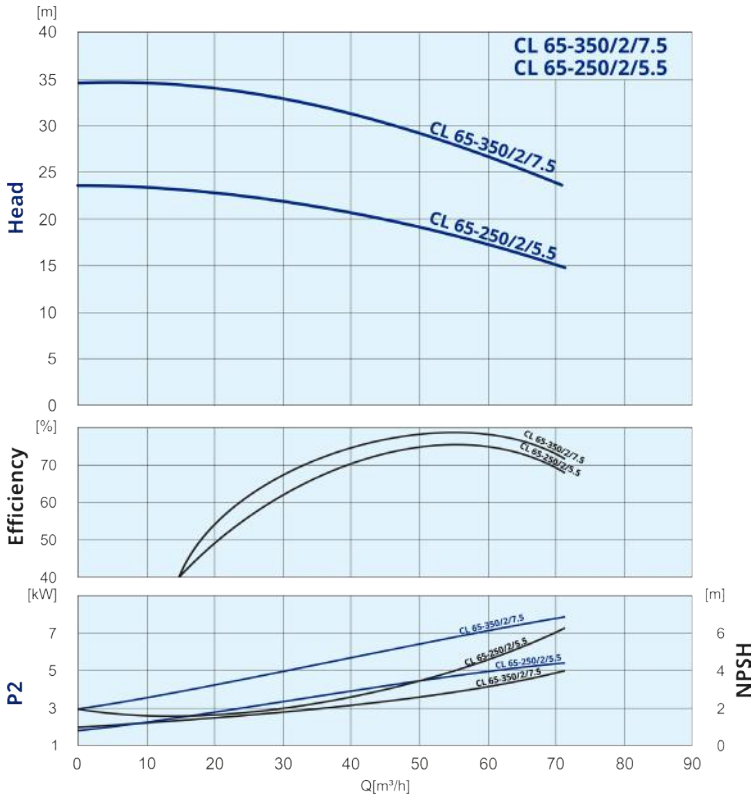

CL 50-550/2/11.0
CL 50-430/2/5.5
CL 50-360/2/4.0
Head
Efficiency
P2
NPSH
Q[m³/h]

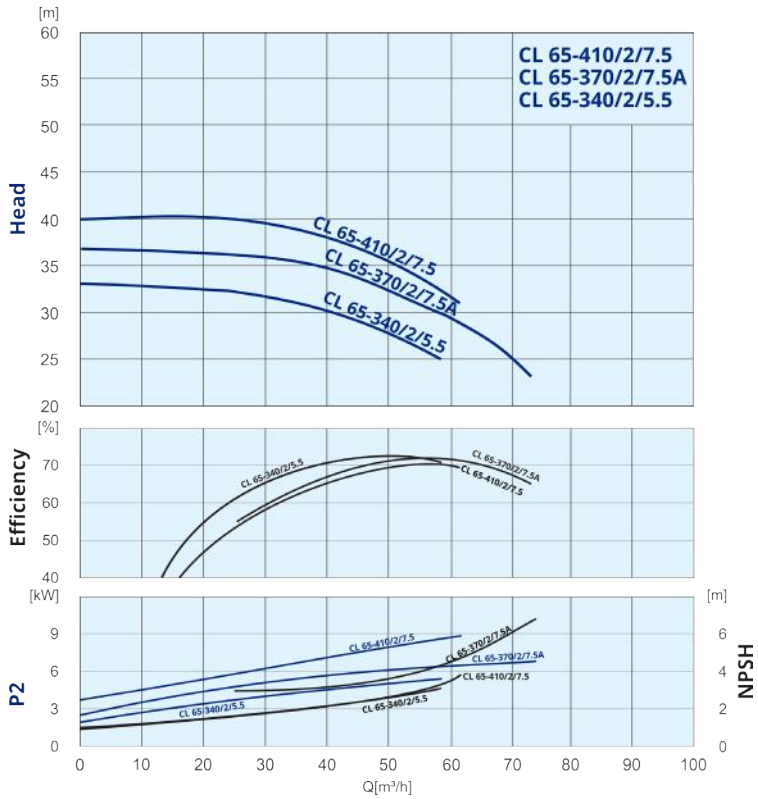

CL 50-630/2/15.0
CL 50-540/2/11.0
CL 50-420/2/7.5
Head
Efficiency
P2
NPSH
Q[m³/h]

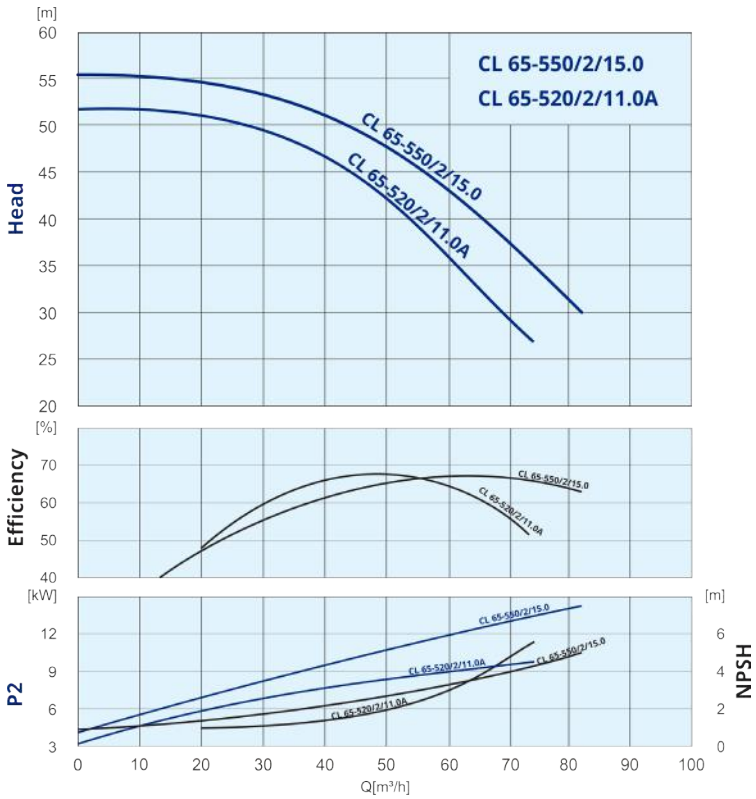

CL 50-780/2/15.0A
CL 50-700/2/11.0A
CL 50-780/2/15.0A
CL 50-700/2/11.0A
Head
Efficiency
P2
NPSH
Q[m³/h]

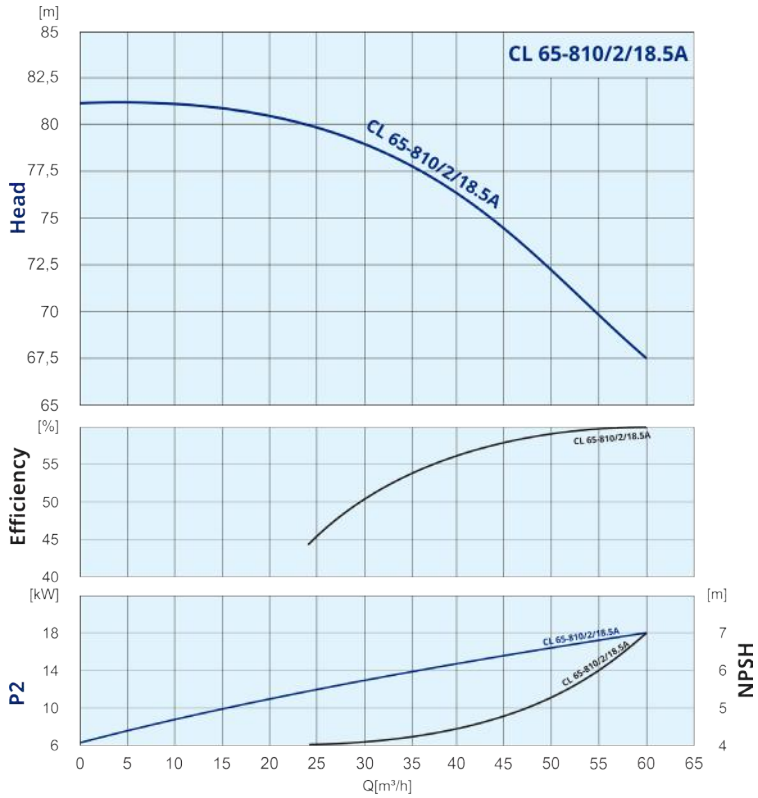

CL 50-910/2/15.0A
CL 50-910/2/15.0A
Head
Efficiency
P2
NPSH
Q[m³/h]

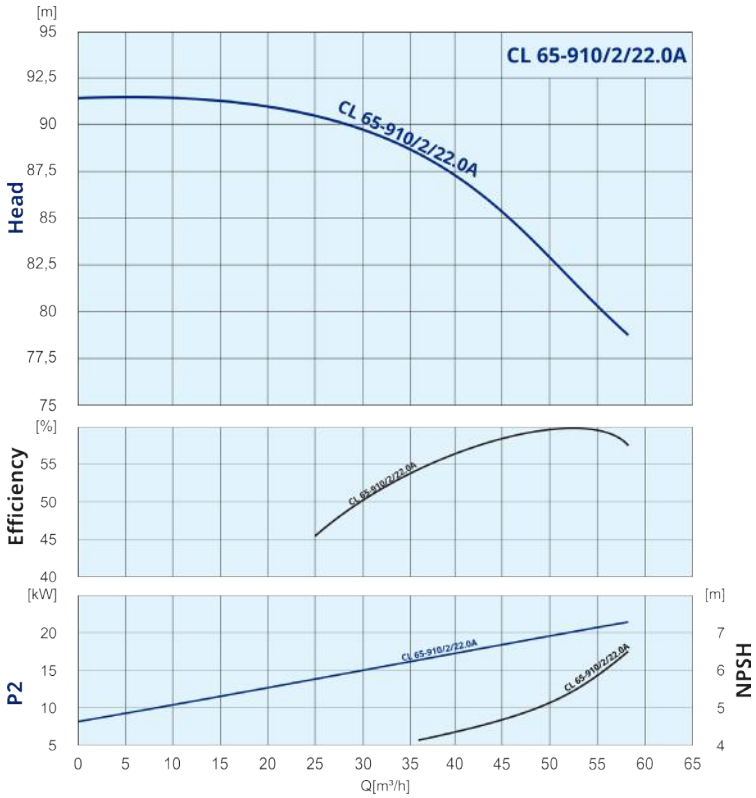

CL 65-260/2/4.0A
CL 65-210/2/3.0
CL 65-170/2/2.2
CL 65-260/2/4.0A
CL 65-210/2/3.0
CL 65-170/2/2.2
Head
Efficiency
P2
NPSH
Q[m³/h]

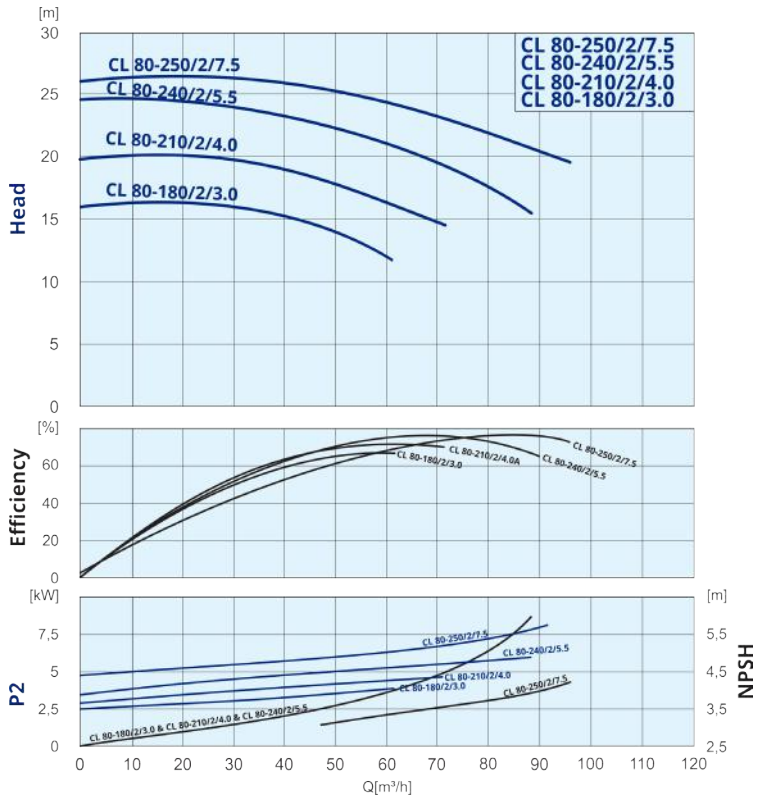

CL 65-350/2/7.5
CL 65-250/2/5.5
CL 65-350/2/7.5
CL 65-250/2/5.5
Head
Efficiency
P2
NPSH
Q[m³/h]

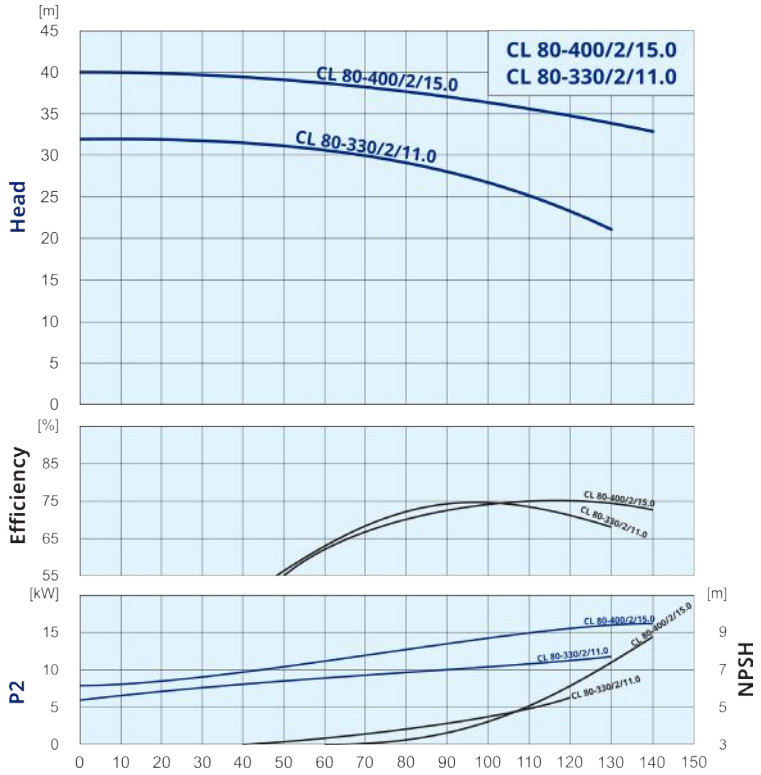

CL 65-410/2/7.5
CL 65-370/2/7.5A
CL 65-340/2/5.5
Head
Efficiency
P2
NPSH
Q[m³/h]

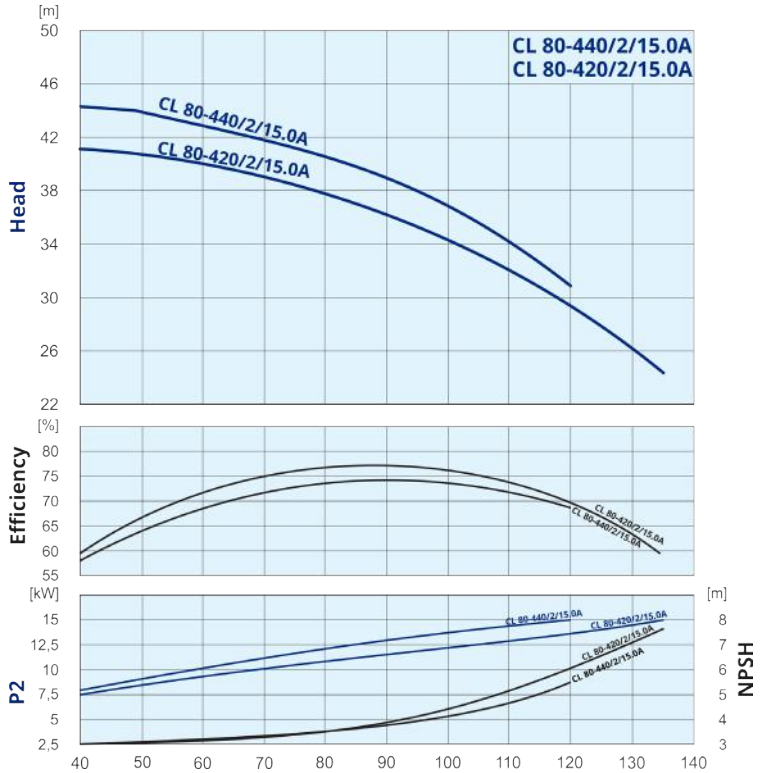

CL 65-550/2/15.0
CL 65-520/2/11.0A
Head
Efficiency
P2
NPSH
Q[m³/h]

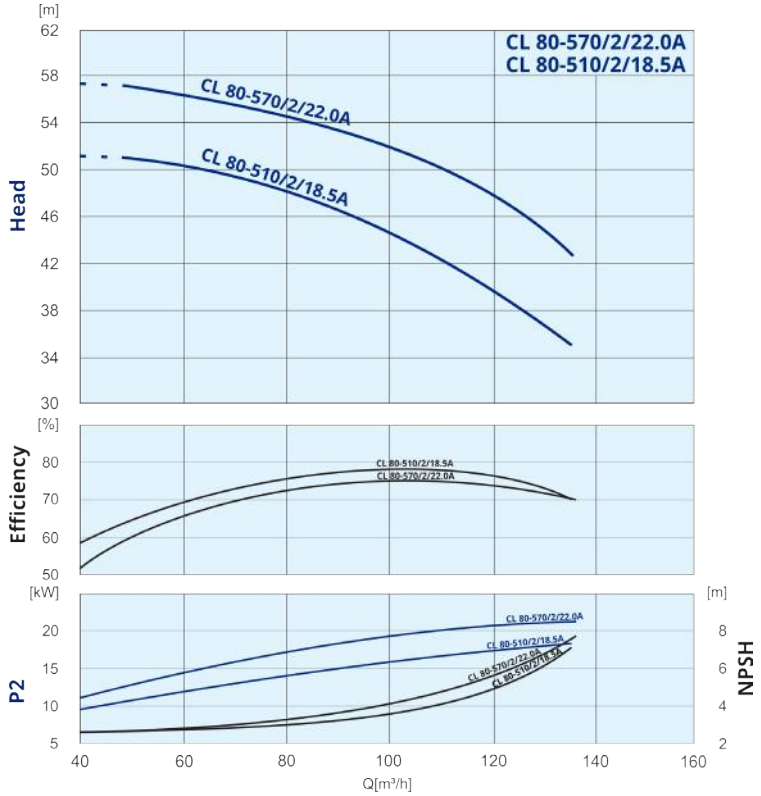

CL 65-810/2/18.5A
Head
Efficiency
P2
NPSH
Q[m³/h]

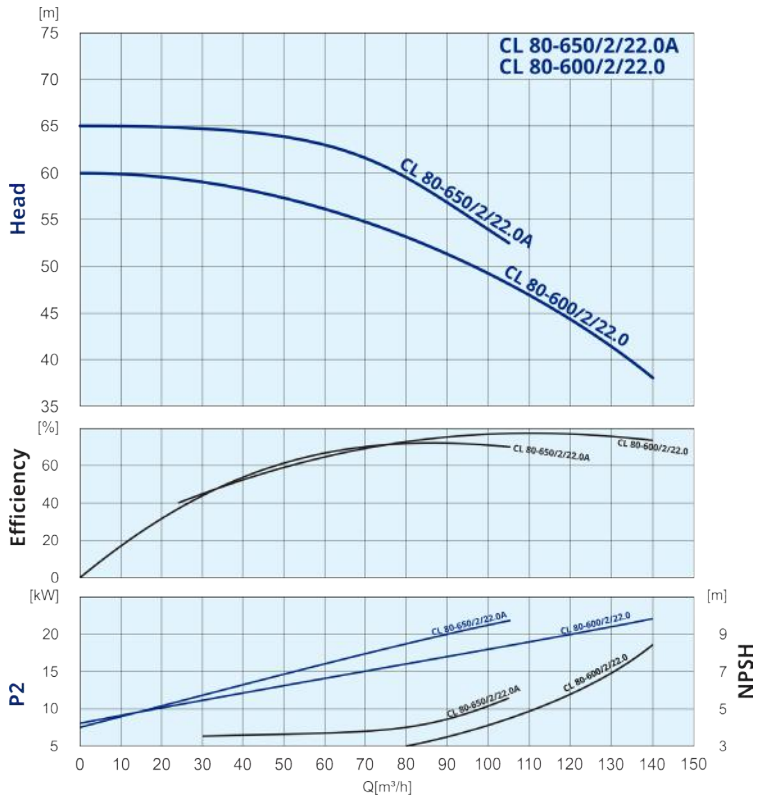

CL 65-910/2/22.0A
Head
Efficiency
P2
NPSH
Q[m³/h]

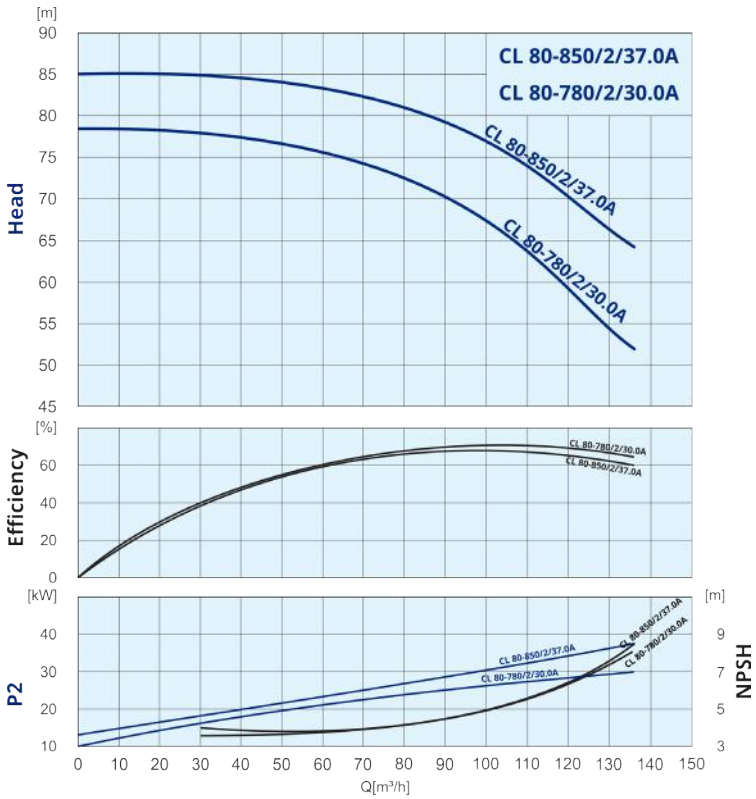

CL 80-250/2/7.5
CL 80-240/2/5.5
CL 80-210/2/4.0
CL 80-180/2/3.0
Head
Efficiency
P2
NPSH
Q[m³/h]

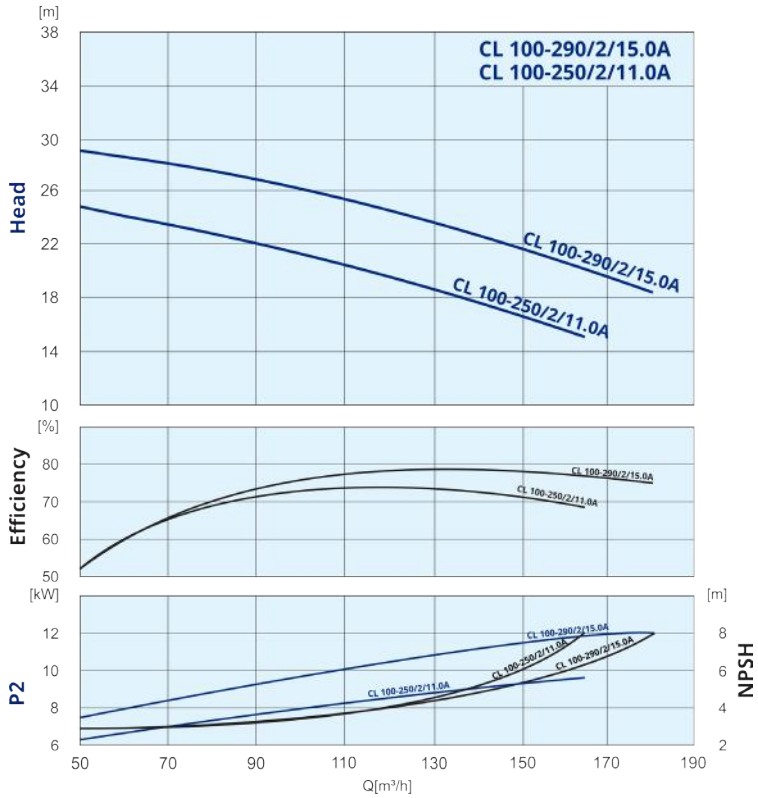

CL 80-400/2/15.0
CL 80-330/2/11.0
Head
Efficiency
P2
NPSH

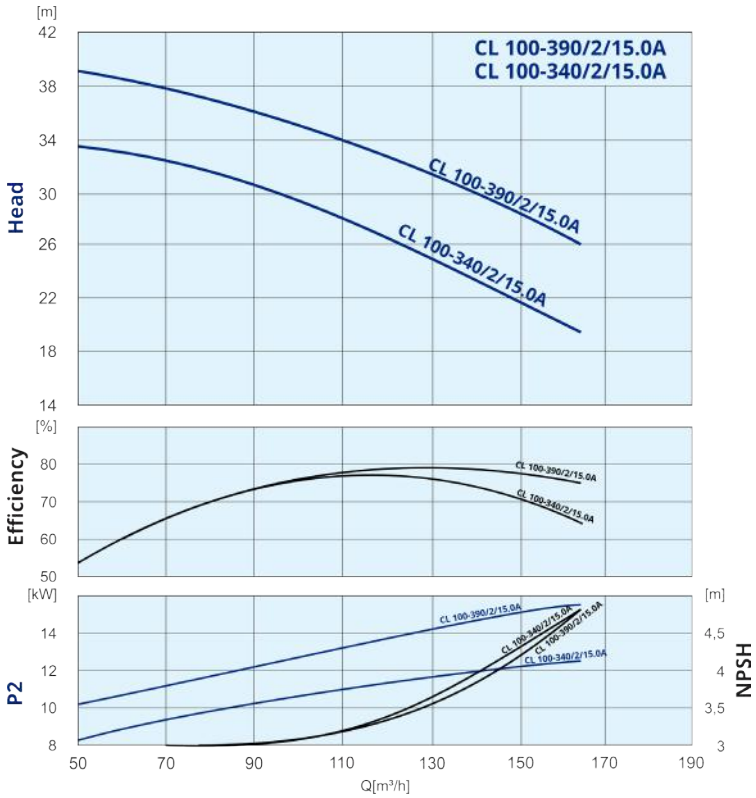

CL 80-440/2/15.0A
CL 80-420/2/15.0A
Head
Efficiency
P2
NPSH

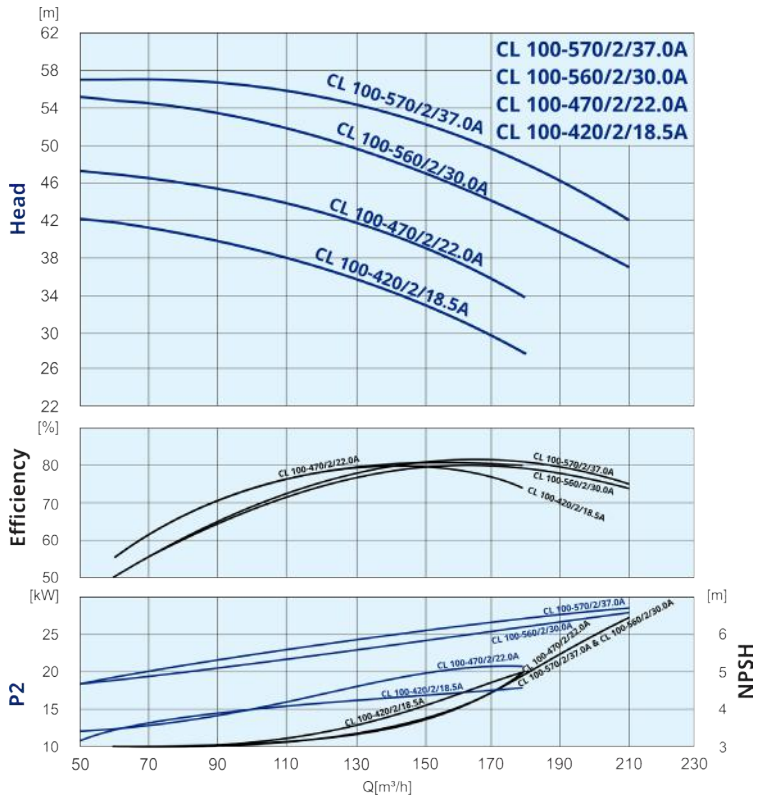

CL 80-570/2/22.0A
CL 80-510/2/18.5A
Head
Efficiency
P2
NPSH
Q[m³/h]

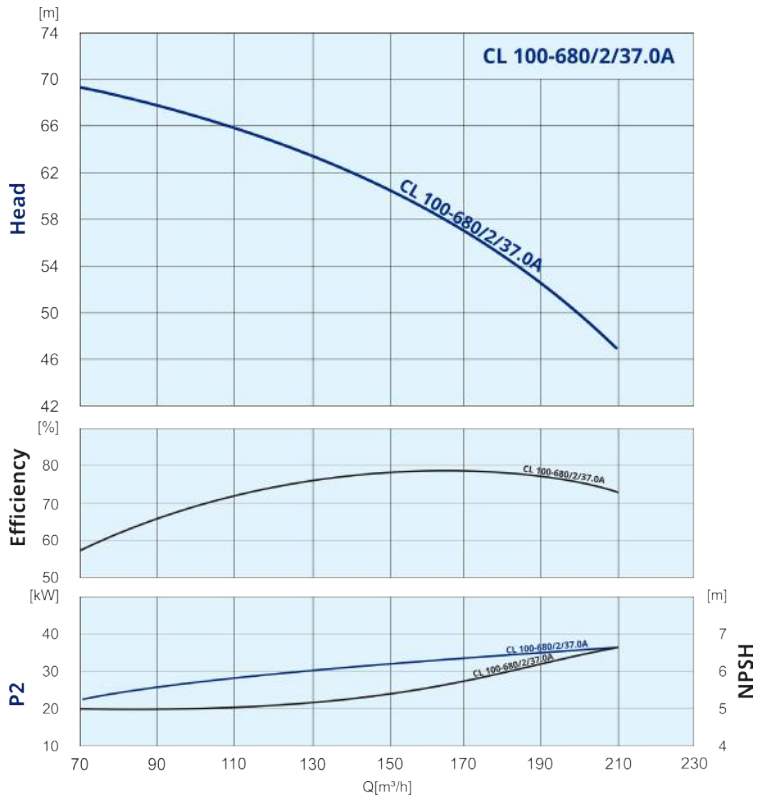

CL 80-650/2/22.0A
CL 80-600/2/22.0
Head
Efficiency
P2
NPSH
Q[m³/h]

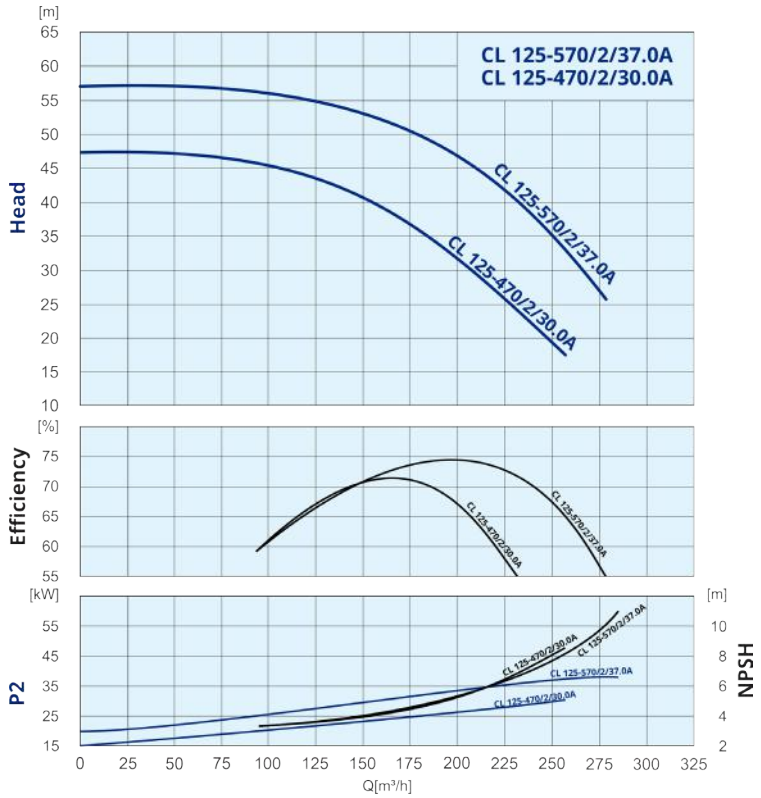

CL 80-850/2/37.0A
CL 80-780/2/30.0A
Head
Efficiency
P2
NPSH
Q[m³/h]


CL 100-290/2/15.0A
CL 100-250/2/11.0A
Head
Efficiency
P2
NPSH
Q[m³/h]

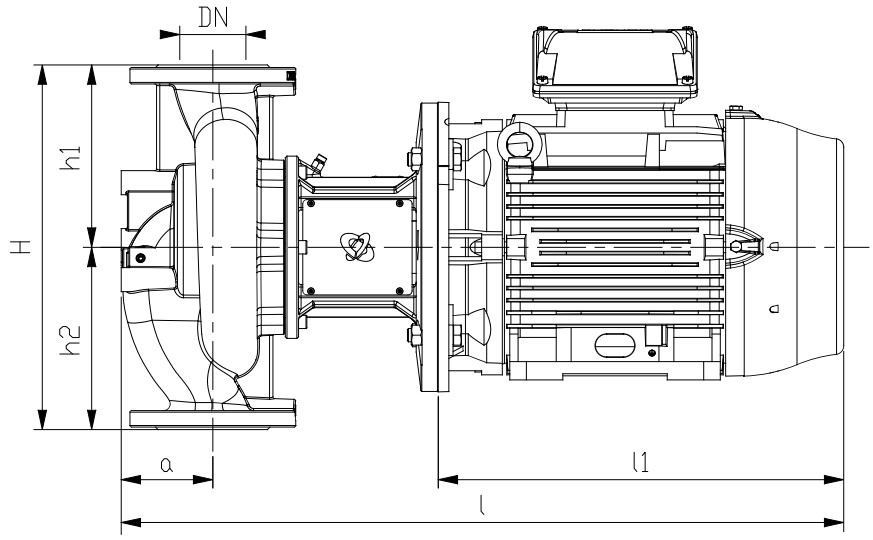

CL 100-390/2/15.0A
CL 100-340/2/15.0A
Head
Efficiency
P2
NPSH
Q[m³/h]

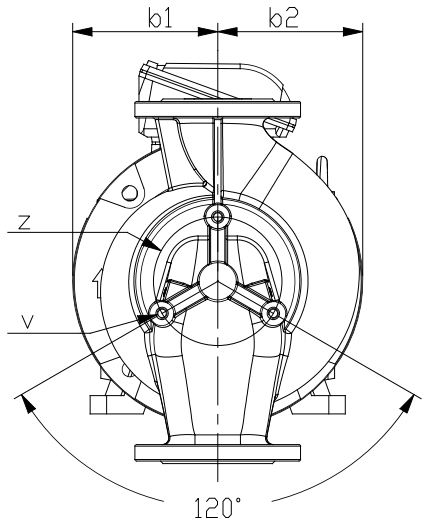

CL 100-570/2/37.0A
CL 100-560/2/30.0A
CL 100-470/2/22.0A
CL 100-420/2/18.5A
Head
Efficiency
P2
NPSH
Q[m³/h]


CL 100-680/2/37.0A
Head
Efficiency
P2
NPSH
Q[m³/h]


CL 125-570/2/37.0A
CL 125-470/2/30.0A
Head
Efficiency
P2
NPSH
Q[m³/h]

CL 2 poles - Dimensions





CL 2 poles DN40F

Code	Type	H	h1	h2	DN	a	l	l1	b1	b2	z	v	PN	Kg
979525070	CL 40-170/2/0.75A	300	140	160	40	100	446	/	93	129	/	/	10	26
979523782	CL 40-220/2/1.1A	300	140	160	40	100	446	/	93	129	/	/	10	27
979523783	CL 40-250/2/1.5A	300	140	160	40	100	446	/	93	129	/	/	10	29
979523784	CL 40-290/2/2.2A	320	150	170	40	100	481	/	108	138	/	/	10	31
979520868	CL 40-350/2/4.0	360	180	180	40	90	559	314	133	127	/	/	16	70
979523786	CL 40-380/2/3.0A	320	150	170	40	100	520	/	108	145	/	/	10	42
979522078	CL 40-430/2/5.5	440	220	220	40	106	700	371	164	164	142	M12x35	16	113
979523787	CL 40-470/2/4.0A	380	180	200	40	100	520	/	127	145	/	/	10	50
979522079	CL 40-530/2/7.5	440	220	220	40	106	700	371	164	164	142	M12x35	16	122
979523789	CL 40-550/2/5.5A	380	180	200	40	100	542	/	127	160	/	/	10	57
979520867	CL 40-600/2/5.5	390	190	200	40	90	639	361	145	135	/	/	16	76
979523790	CL 40-625/2/7.5A	380	180	200	40	100	564	/	127	160	/	/	10	60
979522080	CL 40-630/2/11.0	440	220	220	40	106	848,5	489,5	177	177	142	M12x35	16	177
979523791	CL 40-680/2/7.5A	440	210	230	40	100	584	/	165	160	/	/	10	57
979523792	CL 40-830/2/11.0A	440	210	230	40	100	659	/	165	194	/	/	10	80
979523793	CL 40-920/2/15.0A	440	210	230	40	100	710	/	165	194	/	/	10	84

CL 2 poles DN50F

Code	Type	H	h1	h2	DN	a	l	l1	b1	b2	z	v	PN	Kg
979522031	CL 50-160/2/1.1	340	170	170	50	114	502	237	120	116	130	M12x35	16	44
979523794	CL 50-170/2/1.5A	322	140	182	50	110	456	/	103	129	/	/	10	30
979522030	CL 50-190/2/1.5	340	170	170	50	114	520	255	120	116	130	M12x35	16	48
979523795	CL 50-200/2/2.2A	322	140	182	50	110	491	/	103	128	/	/	10	29
979522032	CL 50-240/2/2.2	340	170	170	50	114	545	280	120	116	130	M12x35	16	53,5
979525071	CL 50-250/2/3.0A	322	140	182	50	110	530	/	103	145	/	/	10	37
979522033	CL 50-290/2/3.0	340	170	170	50	114	609	316	141	141	130	M12x35	16	61,5
979523796	CL 50-310/2/3.0A	340	160	180	50	110	530	/	113	145	/	/	10	37
979522034	CL 50-360/2/4.0	340	170	170	50	100	624	334	168	168	130	M12x35	16	71
979523797	CL 50-370/2/4.0A	340	160	180	50	110	530	/	113	145	/	/	10	42
979522036	CL 50-420/2/7.5	440	220	220	50	117,5	715	370,5	163	163	142	M12x35	16	180
979522035	CL 50-430/2/5.5	340	170	170	50	100	701	371	150	150	130	M12x35	16	100
979522037	CL 50-540/2/11.0	440	220	220	50	117,5	864	489,5	177	177	142	M12x35	16	176
979520870	CL 50-550/2/11.0	425	205	220	50	96	789	479	150	135	/	/	16	130
979522038	CL 50-630/2/15.0	440	220	220	50	117,5	864	489,5	177	177	142	M12x35	16	124
979525073	CL 50-700/2/11.0A	440	210	230	50	125	684	/	165	194	/	/	10	93
979525074	CL 50-780/2/15.0A	440	210	230	50	125	735	/	165	194	/	/	10	97
979525075	CL 50-910/2/15.0A	440	210	230	50	125	735	/	165	194	/	/	10	98

CL 2 poles DN65F

Code	Type	H	h1	h2	DN	a	l	l1	b1	b2	z	v	PN	Kg
979522081	CL 65-170/2/2.2	360	180	180	65	114	557	280	130	118	142	M12x35	16	59,5
979522082	CL 65-210/2/3.0	360	180	180	65	114	621	316	141	141	142	M12x35	16	70,5
979520875	CL 65-250/2/5.5	360	180	180	65	114	639	334	168	168	142	M12x35	16	76
979522083	CL 65-260/2/4.0A	360	155	205	65	140	560	/	108	145	/	/	10	78
979522084	CL 65-340/2/5.5	360	180	180	65	106,5	718	371	150	150	142	M12x35	16	102
979520874	CL 65-350/2/7.5	420	200	220	65	95	611	361	138	125	/	/	16	99
979523001	CL 65-370/2/7.5A	400	180	220	65	140	604	/	122	160	/	/	10	58
979522085	CL 65-410/2/7.5	360	180	180	65	106,5	718	371	150	150	142	M12x35	16	112
979523804	CL 65-520/2/11.0A	440	200	240	65	140	679	/	136	194	/	/	10	83
979520873	CL 65-550/2/15.0	480	225	255	65	95	835	521	160	140	/	/	16	157
979525078	CL 65-810/2/18.5A	475	225	250	65	140	847	/	165	238	/	/	10	140
979525079	CL 65-910/2/22.0A	475	225	250	65	140	847	/	165	238	/	/	10	152

CL 2 poles DN80F

Code	Type	H	h1	h2	DN	a	l	l1	b1	b2	z	v	PN	Kg
979522060	CL 80-180/2/3.0	360	180	180	80	103	624	316	141	141	142	M12x35	16	69,5
979522061	CL 80-210/2/4.0	360	180	180	80	103	640	334	168	168	142	M12x35	16	79
979522062	CL 80-240/2/5.5	360	180	180	80	103	718	372	150	150	142	M12x35	16	107
979522063	CL 80-250/2/7.5	440	220	220	80	110,5	725	371	150	150	155	M12x35	16	118
979522064	CL 80-330/2/11.0	440	220	220	80	110,5	872	489	175	175	155	M12x35	16	175
979522065	CL 80-400/2/15.0	440	220	220	80	110,5	872	489	175	175	155	M12x35	16	179
979523647	CL 80-420/2/15.0A	440	200	240	80	160	770	/	131	194	/	/	10	86
979524489	CL 80-440/2/15.0A	440	200	240	80	160	770	/	131	131	/	/	10	92
979525082	CL 80-510/2/18.5A	500	225	275	80	160	867	/	146	238	/	/	10	129
979525083	CL 80-570/2/22.0A	500	225	275	80	160	867	/	146	238	/	/	10	139
979520876	CL 80-600/2/22.0	530	245	285	80	103	876	550	183	148	/	/	16	210
979525084	CL 80-650/2/22.0A	530	250	280	80	160	1017	/	168	238	/	/	10	161
979525085	CL 80-780/2/30.0A	530	250	280	80	160	1017	/	168	305	/	/	10	299
979525086	CL 80-850/2/37.0A	530	250	280	80	160	1017	/	168	305	/	/	10	321

CL 2 poles DN100F

Code	Type	H	h1	h2	DN	a	l	l1	b1	b2	z	v	PN	Kg
979525087	CL 100-250/2/11.0A	525	225	300	100	190	749	/	136	194	/	/	10	89
979525088	CL 100-290/2/15.0A	525	225	300	100	190	800	/	136	194	/	/	10	93
979525089	CL 100-340/2/15.0A	550	250	300	100	190	812	/	156	194	/	/	10	101
979525090	CL 100-390/2/15.0A	550	250	300	100	190	812	/	156	194	/	/	10	102
979525091	CL 100-420/2/18,5A	550	250	300	100	190	929	/	156	238	/	/	10	140
979525092	CL 100-470/2/22.0A	550	250	300	100	190	929	/	156	238	/	/	10	150
979525093	CL 100-560/2/30.0A	550	250	300	100	190	1047	/	156	205	/	/	10	287
979525094	CL 100-570/2/37.0A	550	250	300	100	190	1047	/	156	205	/	/	10	320
979525095	CL 100-680/2/37.0A	550	250	300	100	190	1047	/	156	205	/	/	10	327

CL 2 poles DN125F

Code	Type	H	h1	h2	DN	a	l	l1	b1	b2	z	v	PN	Kg
979525096	CL 125-470/2/30.0A	620	280	340	125	195	1052	/	195	305	/	/	10	327
979525097	CL 125-570/2/37.0A	620	280	340	125	195	1052	/	195	305	/	/	10	349

CL 4 poles - Q/H performance

CL 4 poles DN40F

Code	Type	P [kW]	I [A]		Q [m³/h]													
					1,80	2,40	3	4,5	6	7,5	9	10,5	12	13,5	15	18	21	24
979522774	CL 40-60/4/0.55	0,55	1,27	H [m]			5,5	5,4	5,4	5	4,8	4,5	4	3,5	3			
979522606	CL 40-90/4/0.55	0,55	1,27				8,5	8	7,9	7,5	7	6,5	6	5,5	4,7			
979521582	CL 40-110/4/0.75	0,75	1,63				11,4	11	10,7	10,5	9,8	9,6	8,8	8	7			
979525115	CL 40-130/4/0.75A	0,75	1,9				13	12,9	12,8	12,4	11,9	11,3	10,6	9,8	8	6		
979522775	CL 40-140/4/1.1	1,1	2,4				14,1	14	13,8	13,6	13	12,8	12	11,2	10,3	8		
979525114	CL 40-190/4/1.1A	1,1	3,5				18,8	18,5	18,3	17,6	17,0	16,0	14,5	13,0	11,0			
979525113	CL 40-220/4/1.5A	1,5	3,4				22,1	22,0	21,5	21,0	20,0	19,5	18,0	16,5	14,9	10,2		

CL 4 poles DN50F

Code	Type	P [kW]	I [A]		Q [m³/h]													
					3	4,5	6	7,5	9	10,5	12	13,5	15	18	21	24	27	30
979525118	CL 50-40/4/0.25A	0,25	0,9	H [m]			4,6	4,5	4,3	4,1	3,9	3,6	3,3	2,4				
979522776	CL 50-50/4/0.55	0,55	1,27				5,2	5	4,9	4,8	4,7	4,6	4,5	4,3	4,1	3,6	3	2,5
979521591	CL 50-70/4/0.55	0,55	1,27				6,5	6,4	6,4	6,3	6	5,9	5,8	5,5	5,3			
979522777	CL 50-80/4/1.1	1,1	2,4				7,9	7,8	7,8	7,7	7,6	7,6	7,5	6,8	6,5	5,9	5	
979521589	CL 50-100/4/0.75	0,75	1,63				9	8,9	8,9	8,8	8,5	8,4	8,3					
979521588	CL 50-110/4/0.75	0,75	1,63		10,9	10,9	10,8	10,8	10,7	10,6								
979521587	CL 50-110/4/1.1	1,1	2,4		10,9	10,9	10,8	10,8	10,7	10,6	10,1	10	9,8	8,8	8,1	7		
979521586	CL 50-120/4/0.75	0,75	1,63			12,2	12,1	12										
979521585	CL 50-120/4/1.1	1,1	2,4			12,2	12,1	12	11,9	11,8	11,7	11,5	11	10,5				
979521584	CL 50-140/4/0.75	0,75	2,4			14,2	14	13,9	13,8	13,8	13,5	13						
979522778	CL 50-140/4/1.5	1,5	3,26			14,2	14	13,9	13,8	13,7	13,5	13	11,5	11,1	10			
979525117	CL 50-180/4/1.5A	1,5	3,4				18,3	18	17,7	17,4	17	16,6	16,2	15	13,7	12		
979525116	CL 50-220/4/2.2A	2,2	4,8				22,5	22,3	22	21,7	21,4	21	20,5	19,5	18,5	17	15	

CL 4 poles DN65F

Code	Type	P [kW]	I [A]		Q [m³/h]													
					9	10,5	12	13,5	15	18	21	24	27	30	36	42	48	54
979522771	CL 65-50/4/0.55	0,55	1,27	H [m]					5	4,9	4,7	4,4	4					
979521617	CL 65-70/4/0.75	0,75	1,63						6,5	6,1	6	5,9	5,5	5				
979525123	CL 65-80/4/0.75A	0,75	1,9				8,2	8	7,9	7,7	7,4	7	6,6	5,8	4			
979522772	CL 65-90/4/0.75	0,75	1,63			8,7	8,7	8,6	8,6	8,5								
979522779	CL 65-90/4/1.1	1,1	2,4			8,7	8,7	8,6	8,6	8,5	8,3	8	7,5	7,7	7			
979522773	CL 65-120/4/1.5	1,5	3,26				12	11,8	11,7	11,2	11	10,8	10,1					
979525122	CL 65-130/4/1.1A	1,1	4,8				12,4	12,2	12	11,5	10,8	10	9	8	5,8			
979525121	CL 65-140/4/1.5A	1,5	3,4				14,3	14,2	14,1	13,7	13	12,3	11,3	10,5	7,8	5		
979522780	CL 65-150/4/2,2	2,2	4,64			15,5	15,4	15,3	15,2	14,9	14,8	14,5	14	13,8	13	12	10,5	
979525120	CL 65-180/4/2.2A	2,2	4,8				18,5	18,3	18,1	17,5	17	16,5	15,5	14,5	12,5	10		
979525119	CL 65-220/4/3.0A	3	6,8				22,5	22,4	22,3	21,8	21,5	20,9	20,2	19,4	17,3	15		

CL 4 poles DN80F

Code	Type	P [kW]	I [A]		Q [m³/h]													
					15	18	21	24	27	30	36	42	48	54	60	75	90	105
979521599	CL 80-40/4/0.55	0,55	1,27	H [m]	3,9	3,9	3,8											
979522764	CL 80-40/4/0.75	0,75	1,63		3,9	3,9	3,8	3,8	3,8	3,8	3,7	3,6	3,5					
979521596	CL 80-60/4/0.75	0,75	1,63		6,1	6,1												
979522781	CL 80-60/4/1.1	1,1	2,4		6,1	6,1	6	6	5,9	5,7	5,6	5,5						
979522765	CL 80-60/4/1.5	1,5	3,26		6,1	6,1	6	6	5,9	5,7	5,6	5,5	5,3	5	4,8	3,6		
979522766	CL 80-80/4/1.5	1,5	3,26				8,2	8,2	8,1	8	7,9	7,8						
979522767	CL 80-80/4/2.2	2,2	4,64				8,2	8,2	8,1	8	7,9	7,8	7,2	7,1	6,9	5,4	3	
979522782	CL 80-90/4/2.2	2,2	4,64								8,8	8,7	8,5	8,1	7,9	6		
979522768	CL 80-100/4/1.5	1,5	3,26				10,2	10,1	10	9,9	9,8							
979522769	CL 80-100/4/2.2	2,2	4,64				10,2	10,1	10	9,9	9,8	9,5	9,2	9	8,5	7		
979521595	CL 80-110/4/2.2	2,2	4,64						10,6	10,7	10,5	10,2	9,9					
979522770	CL 80-120/4/2.2	2,2	4,64					12	11,9	11,8	11,7	11,5	11,2					
979525126	CL 80-130/4/2.2A	2,2	4,8					12,5	12,4	12,3	12,1	11,7	11,1	10,5	9,6			
979521594	CL 80-140/4/2.2	2,2	4,64			15	14,8	14,7	14,6									
979522783	CL 80-140/4/3.0	3	6,17			15	14,8	14,7	14,6	14,5	14	13,7	13,4	13	12	10,5		
979525125	CL 80-200/4/4.0A	4	8,2							19,5	19,1	18,5	17,5	16,5	15,5	11		
979525124	CL 80-230/4/5.5A	5,5	10,6							23	22,6	22,2	21,4	20,6	19,7	16,5	12	

CL 4 poles DN100F

Code	Type	P [kW]	I [A]		Q [m³/h]													
					24	27	30	36	42	48	54	60	75	90	105	120	135	150
979525131	CL 100-85/4/1.5A	1,5	3,4	H [m]				7,7	7,5	7,3	7	6,7	5,9	5				
979525130	CL 100-100/4/2.2A	2,2	4,8					9,7	9,5	9,3	9	8,8	8,1	7,1	6			
979521603	CL 100-110/4/2.2	2,2	4,64					10	9,8	9,7	9,3	9						
979525129	CL 100-125/4/3.0A	3	6,8					12	11,7	11,5	11,3	11	9,5	8,5	7			
979521602	CL 100-130/4/2.2	2,2	4,64		12,9	12,8	12,7	12,5	12	11,7								
979521601	CL 100-130/4/3.0	3	6,17		12,9	12,8	12,7	12,5	12	11,7	11,5	11,2	10					
979521600	CL 100-140/4/3.0	3	6,17		14,4	14,3	14,2	14,1	13,9	13,7								
979522785	CL 100-140/4/4.0	4	8,11		14,4	14,3	14,2	14,1	13,9	13,7	13,5	13,4	12,5	11,5	10,5			
979525128	CL 100-190/4/5.5A	5,5	10,6								19	18,5	17,3	16	14	12		
979525127	CL 100-220/4/7.5A	7,5	15,3								22	21,9	21	20	19	17		

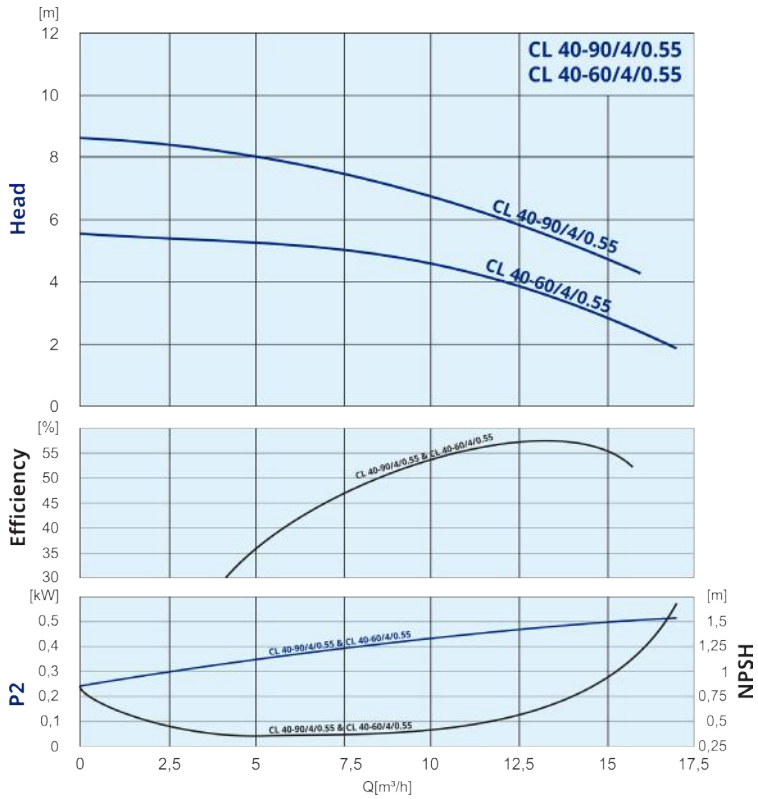
CL 4 poles DN125F

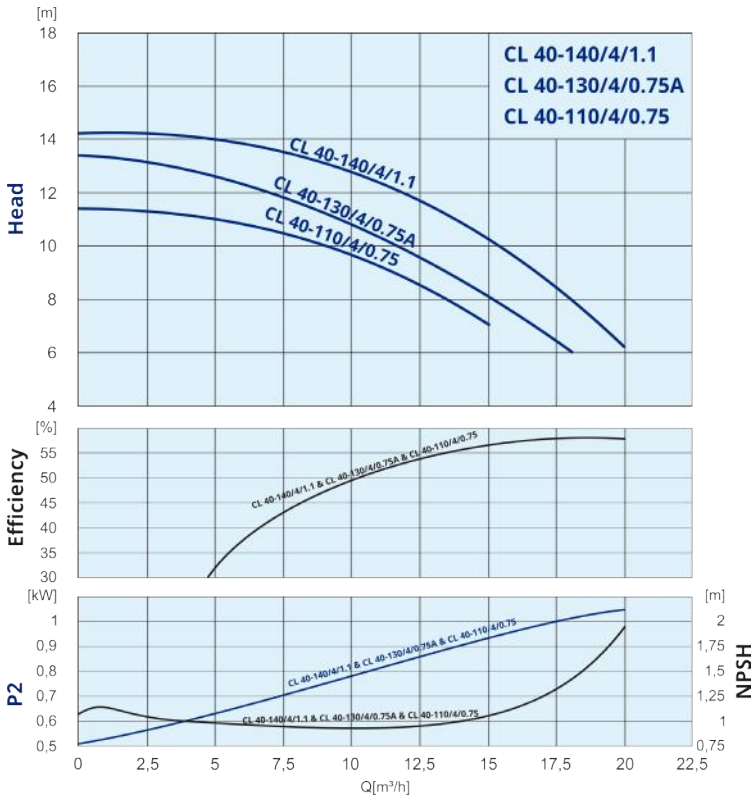
Code	Type	P [kW]	I [A]		Q [m³/h]													
					54	60	66	72	78	90	105	120	135	150	165	180	210	240
979524645	CL 125-120/4/5.5A	5,5	10,6	H [m]	12,2	11,9	11,8	11	10,6	9,6	8	6	3,5					
979524506	CL 125-160/4/5.5A	5,5	10,6		15,5	15,2	15	14,6	14,1	12,4	12	10	8	6				
979523643	CL 125-195/4/7.5A	7,5	15,3			19,5	19	18,8	18,3	18	17	15,7	14	12,5	10,5			
979525132	CL 125-220/4/11.0A	11	22,4			21,6	21,4	21,3	21,2	20,8	20	19	17,8	16,2	14,2	12		

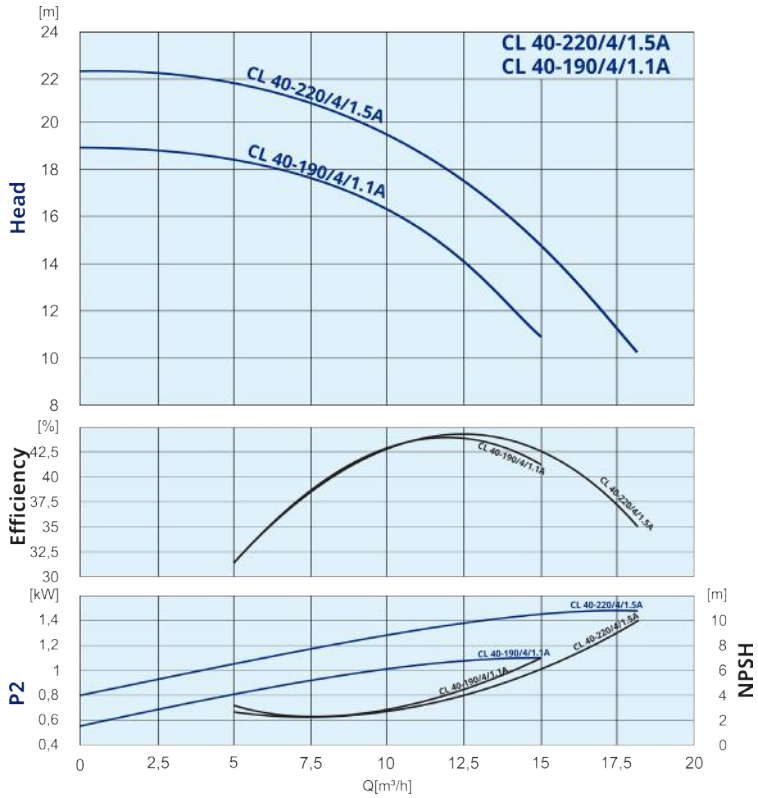
CL 4 poles DN150F

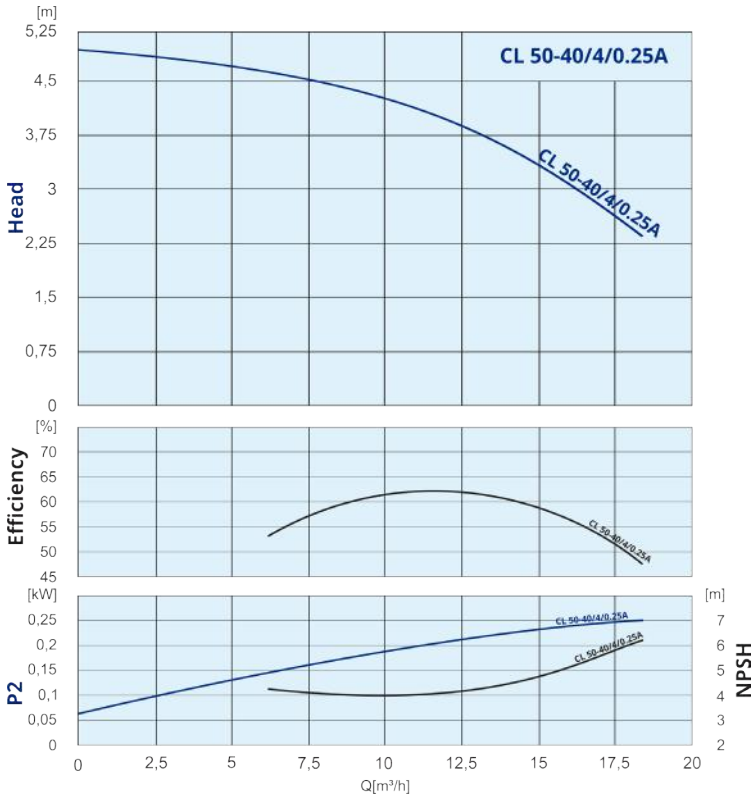
Code	Type	P [kW]	I [A]		Q [m³/h]													
					70	75	90	105	120	135	150	165	180	195	210	225	240	280
979525133	CL 150-150/4/7.5A	7,5	15,3	H [m]		15,5	15	14,8	13,7	13	12,5	11,5	11	9,8	9	8	6,5	
979525134	CL 150-170/4/11.0A	11	22,4			17,5	17,3	17	16	15,5	15	14,8	13,8	12,5	12	11	9,5	6,1
979525135	CL 150-190/4/11.0A	11	22,4			18,5	18,4	18,2	17,8	17,3	16,5	16	15,4	14,4	13,3	12,8	11,7	
979525137	CL 150-210/4/15.0A	15	30,5				21,5	21,3	20,8	20,3	19,8	19,4	18,5	17,8	17	16	15,3	12,3

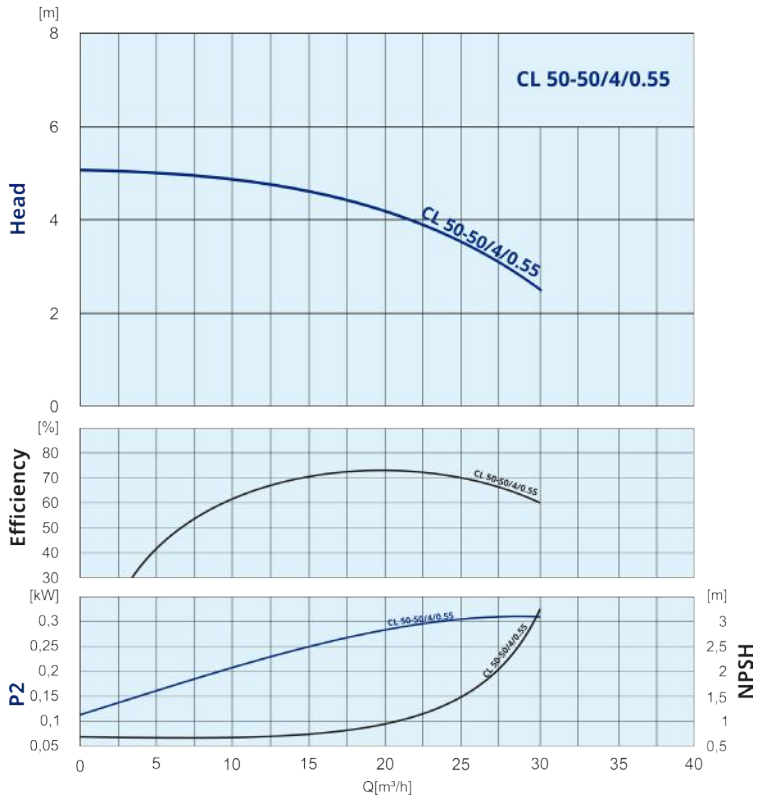
CL 4 poles - Performance curves







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Efficiency
[%]
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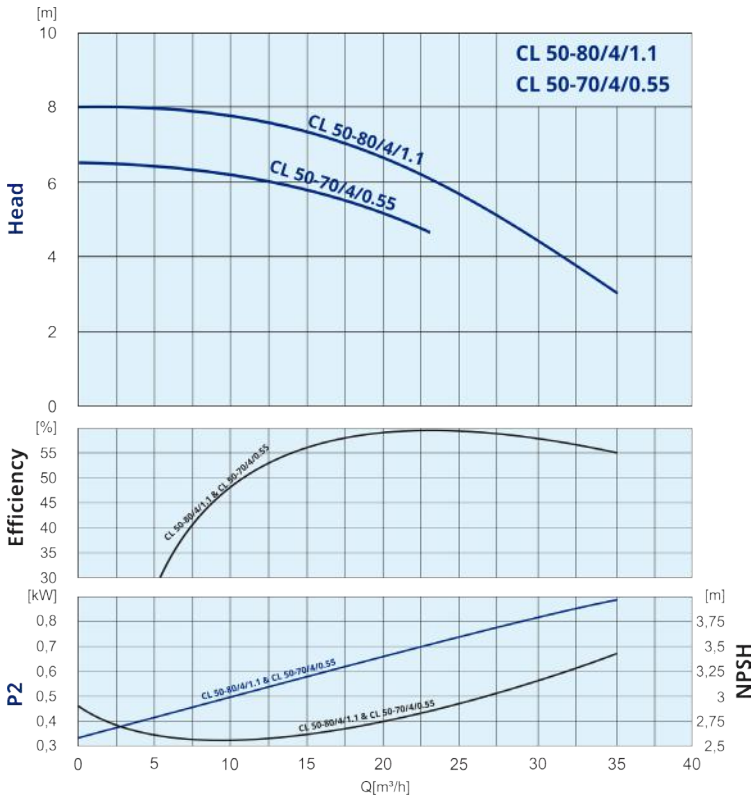
NPSH
[m]
CL 50-50/4/0.55
CL 50-50/4/0.55
Q[m³/h]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P2
[kW]
NPSH
[m]
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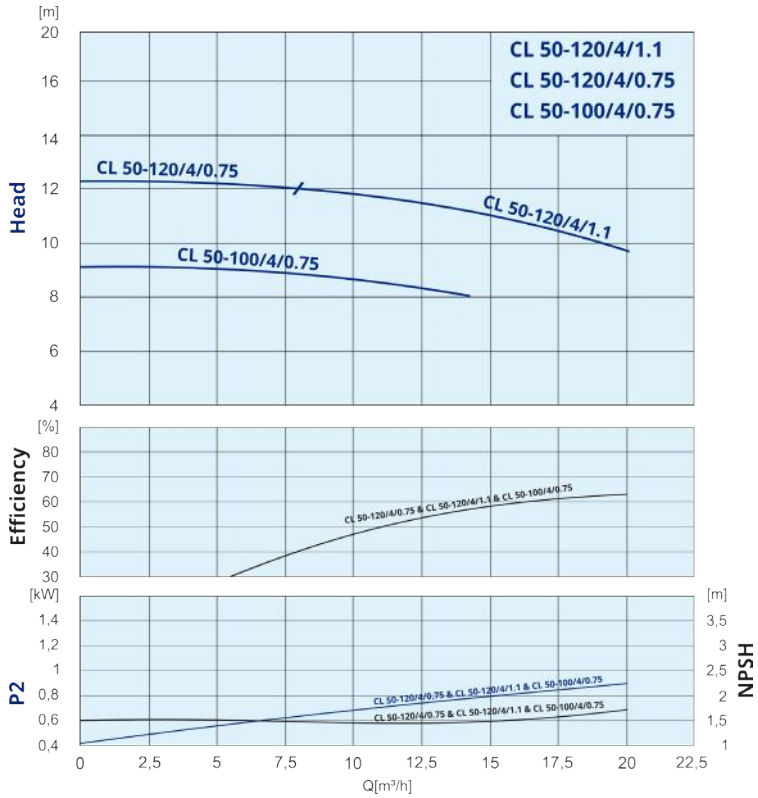
CL 50-80/4/1.1 & CL 50-70/4/0.55
Q[m³/h]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[%]
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[m]
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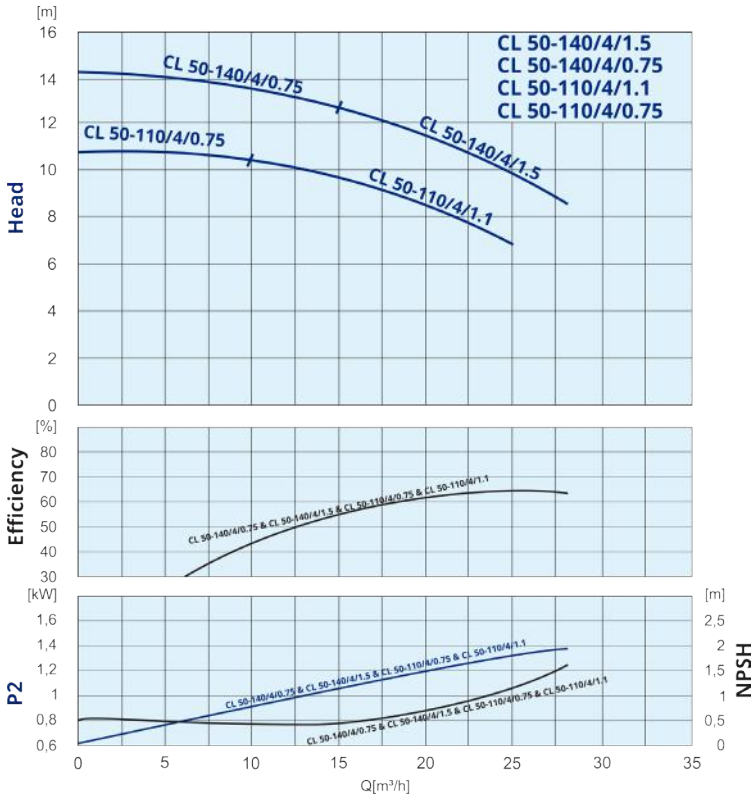
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CL 50-110/4/0.75
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CL 50-140/4/1.5
CL 50-110/4/0.75
CL 50-110/4/1.1
Efficiency
[%]
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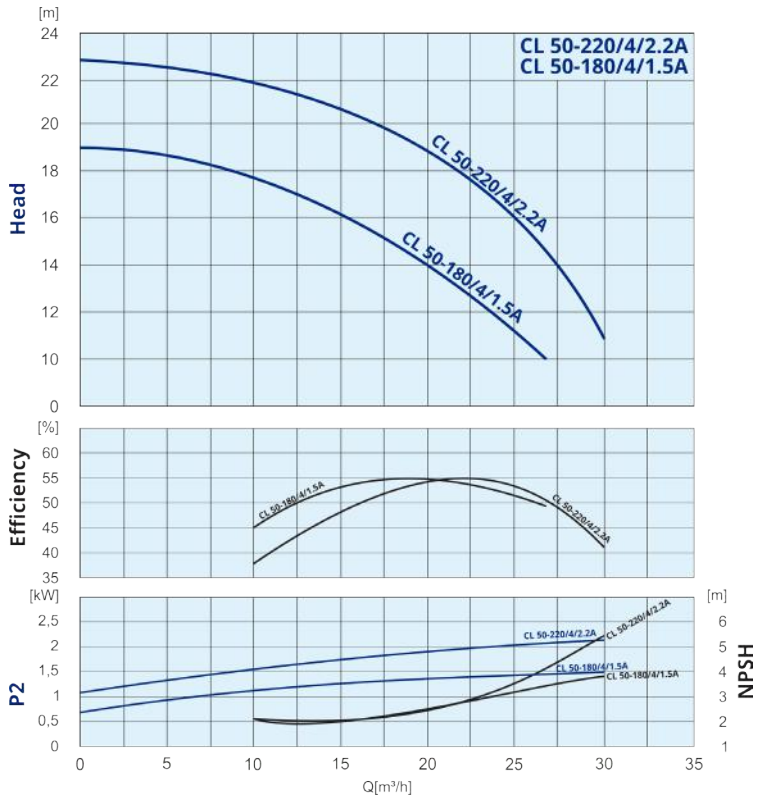
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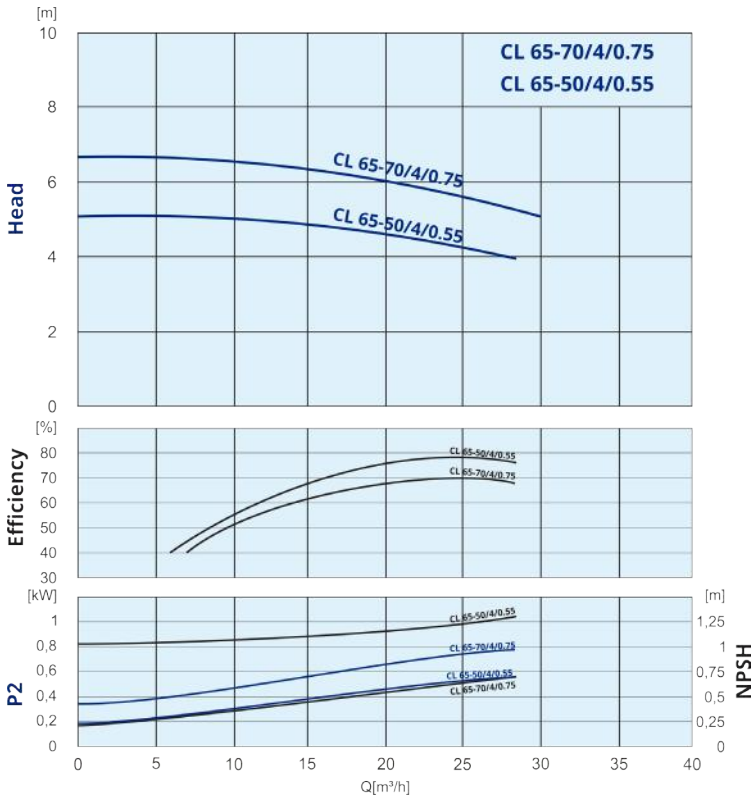
CL 50-180/4/1.5A
Efficiency
[%]
P2
[kW]
NPSH
[m]
Q[m³/h]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CL 65-50/4/0.55
Head
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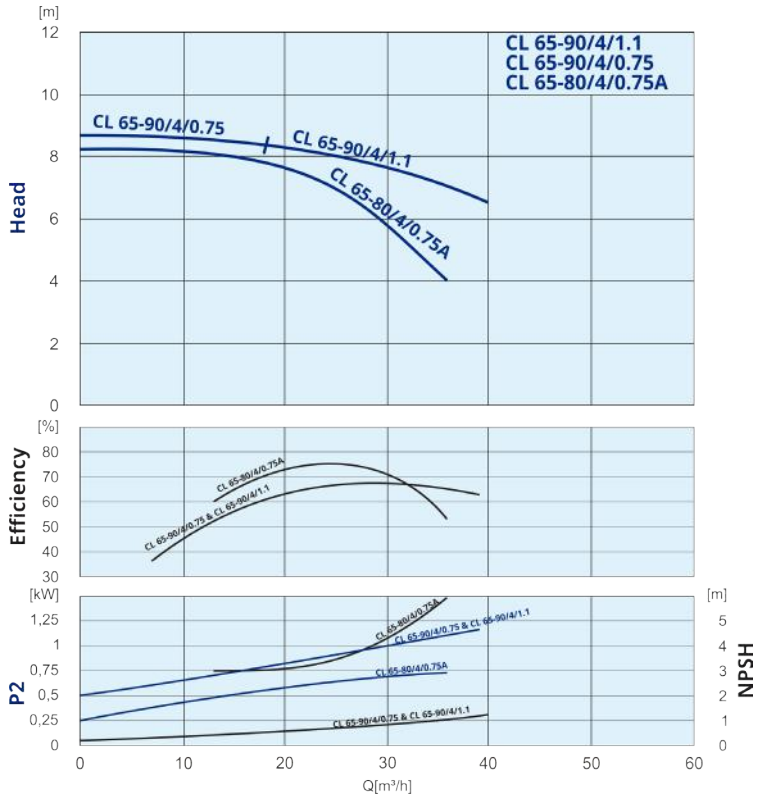
CL 65-70/4/0.75
CL 65-50/4/0.55
Efficiency
[%]
P2
[kW]
NPSH
[m]
Q[m³/h]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CL 65-80/4/0.75A
Head
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CL 65-90/4/1.1
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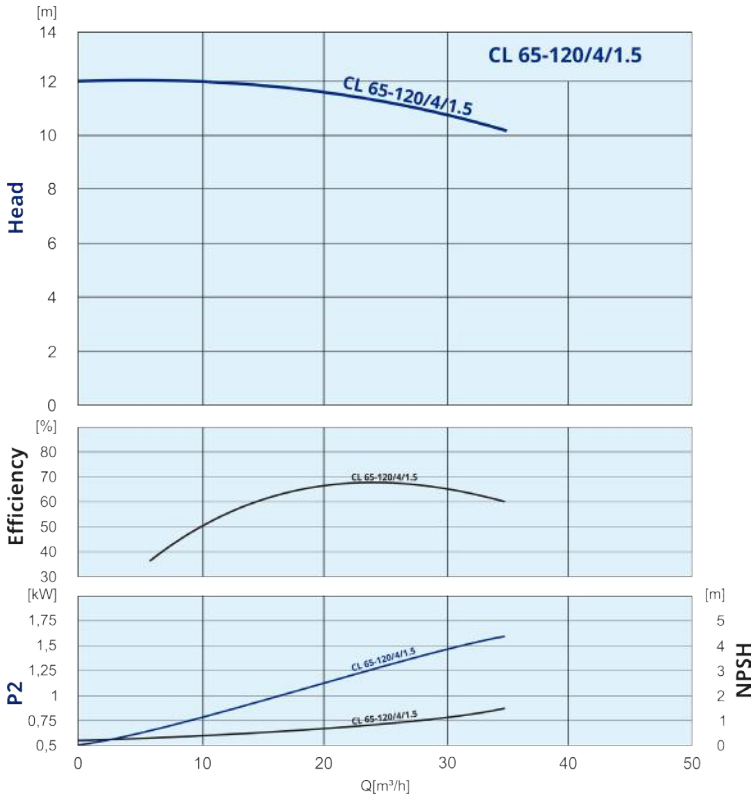
Efficiency
[%]
P2
[kW]
NPSH
[m]
Q[m³/h]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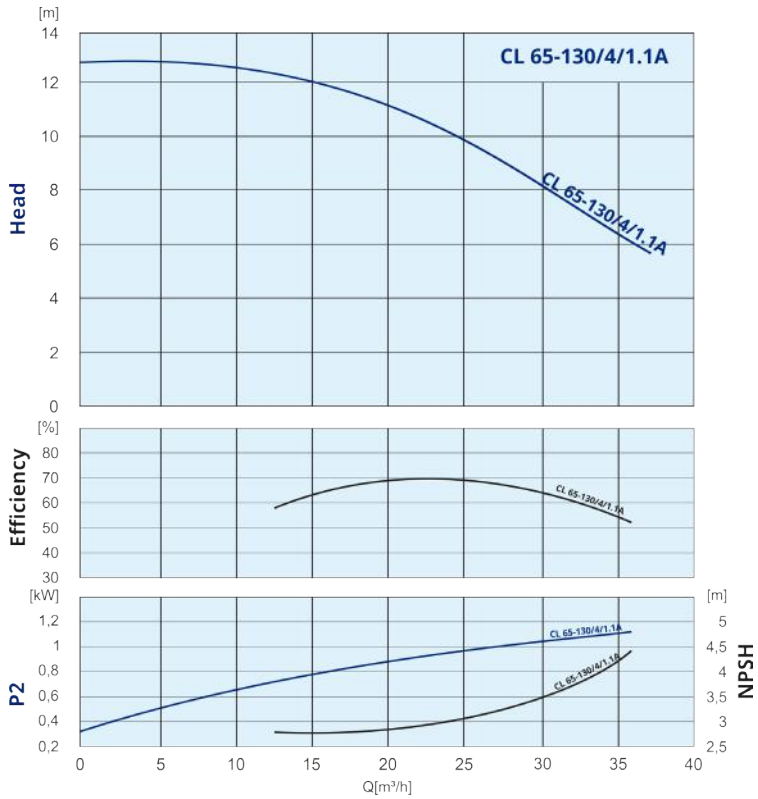
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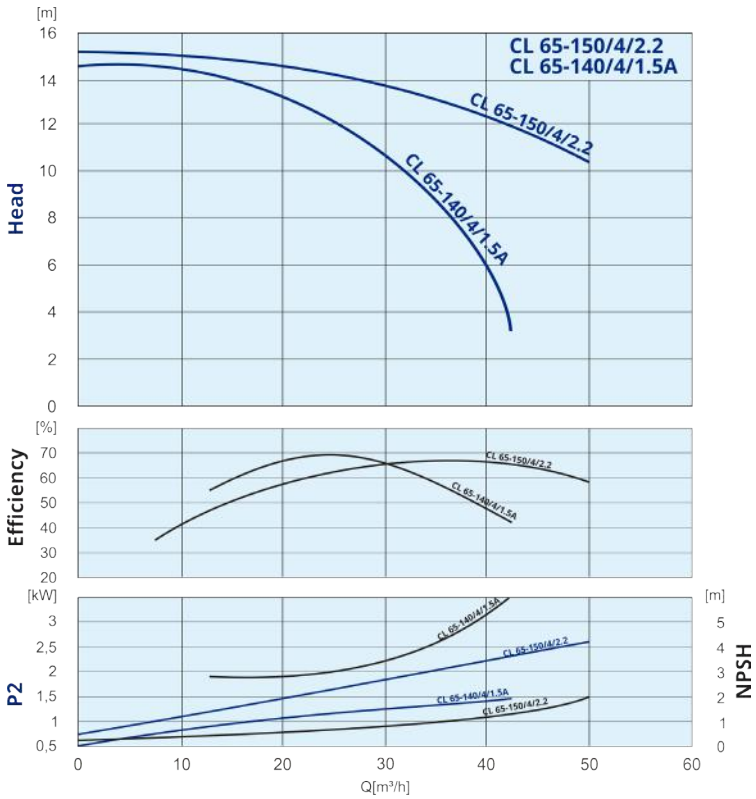
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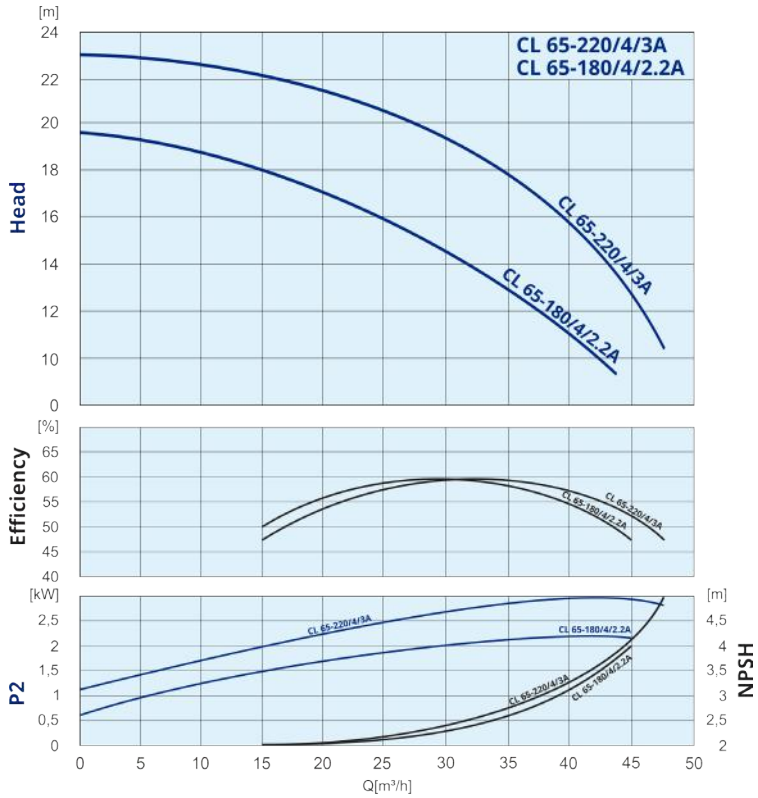
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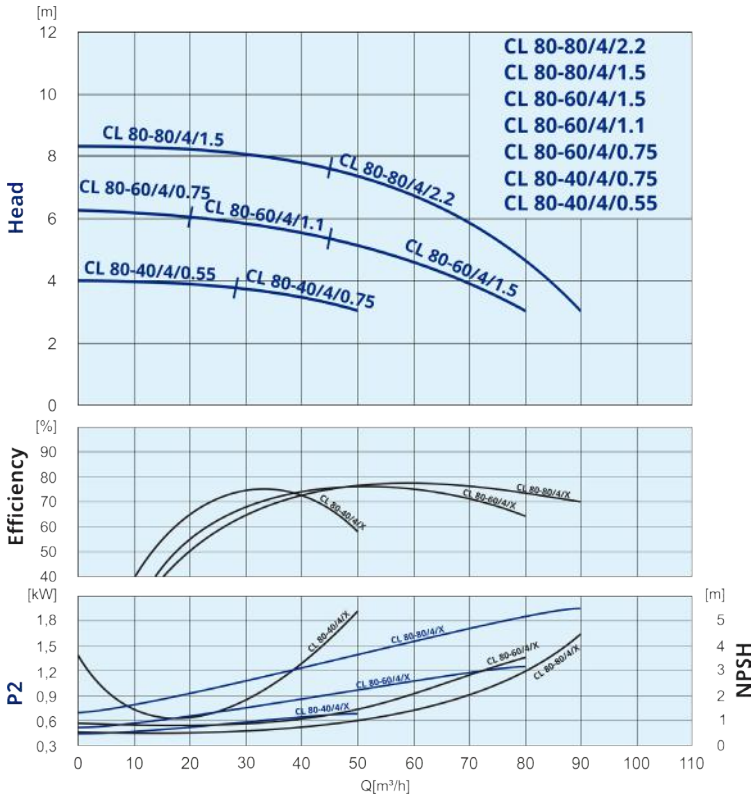
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CL 80-60/4/0.75
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CL 80-60/4/1.5
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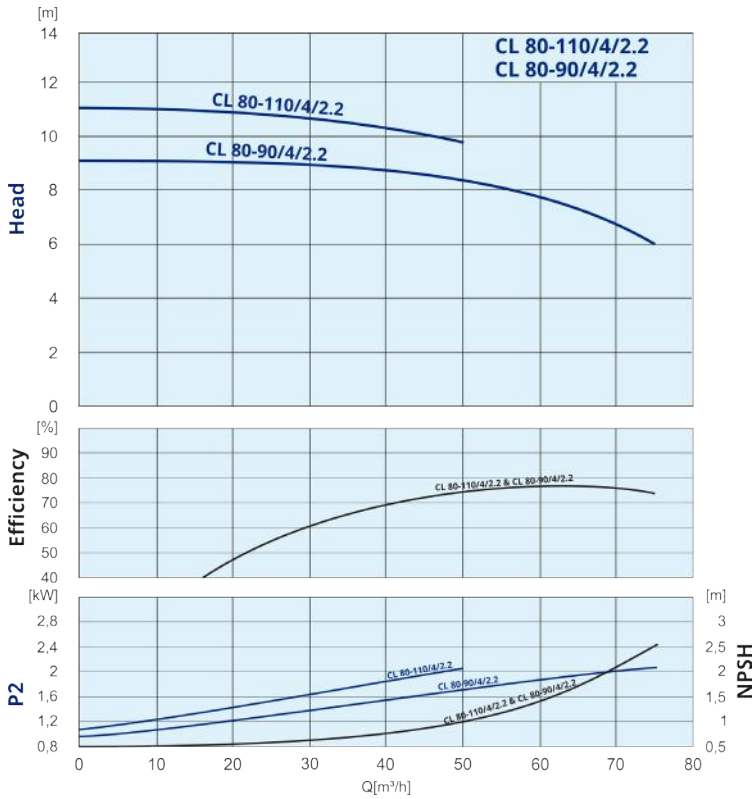
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Head
Efficiency
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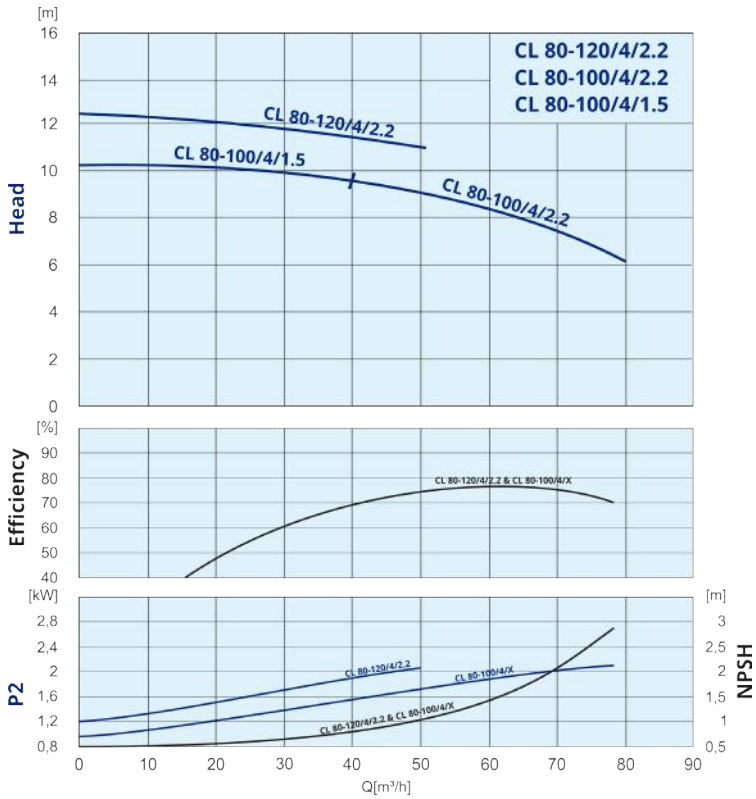
Q[m³/h]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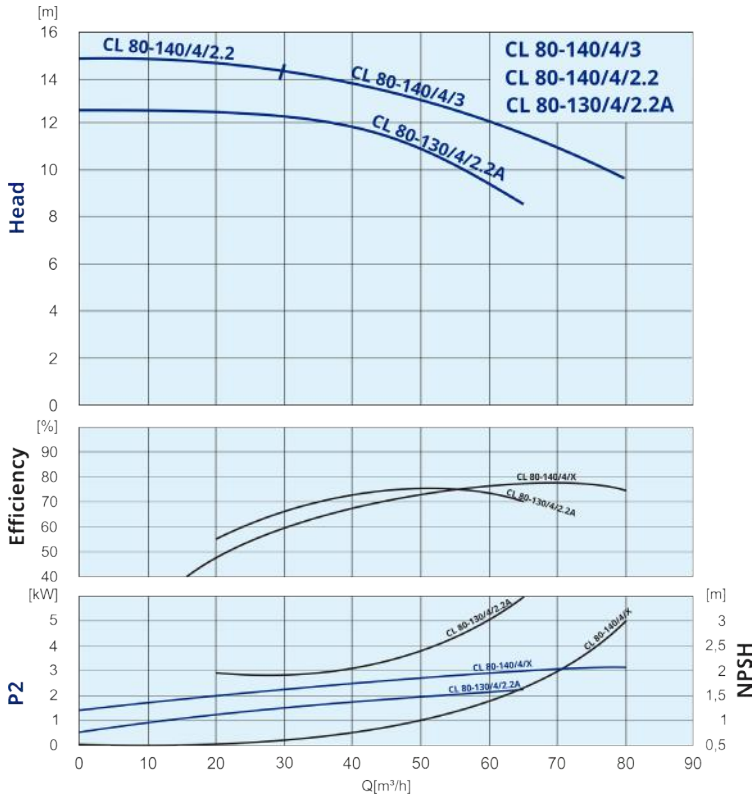
CL 80-100/4/1.5
CL 80-120/4/2.2
CL 80-100/4/1.5
CL 80-100/4/2.2
Head
Efficiency
P2
NPSH
Q[m³/h]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CL 80-130/4/2.2A
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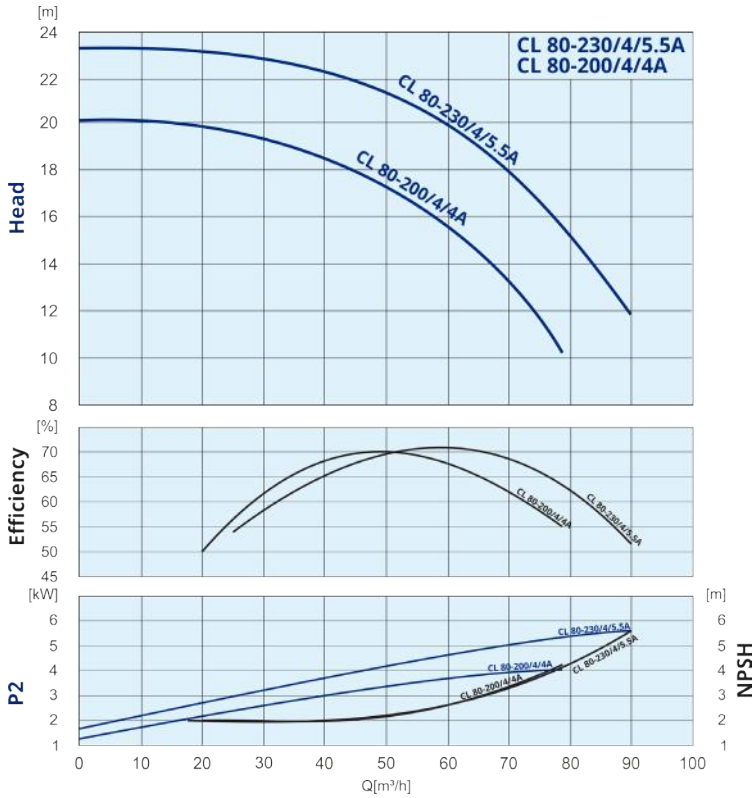
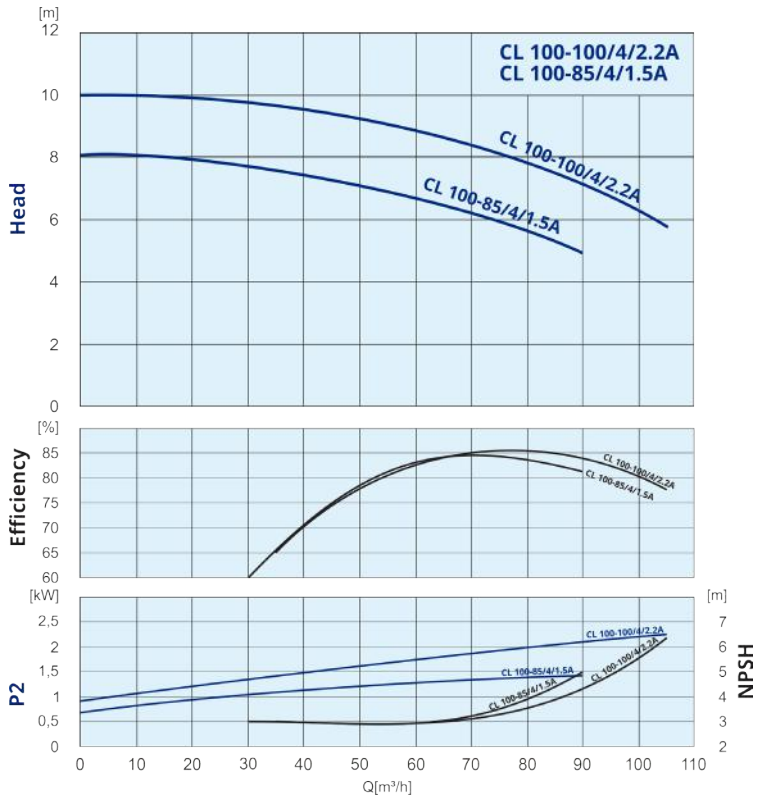
CL 80-140/4/3
CL 80-130/4/2.2A
Head
Efficiency
P2
NPSH
Q[m³/h]


CL 80-230/4/5.5A
CL 80-200/4/4A
CL 80-230/4/5.5A
CL 80-200/4/4A
Head
Efficiency
P2
NPSH
Q[m³/h]


CL 100-100/4/2.2A
CL 100-85/4/1.5A
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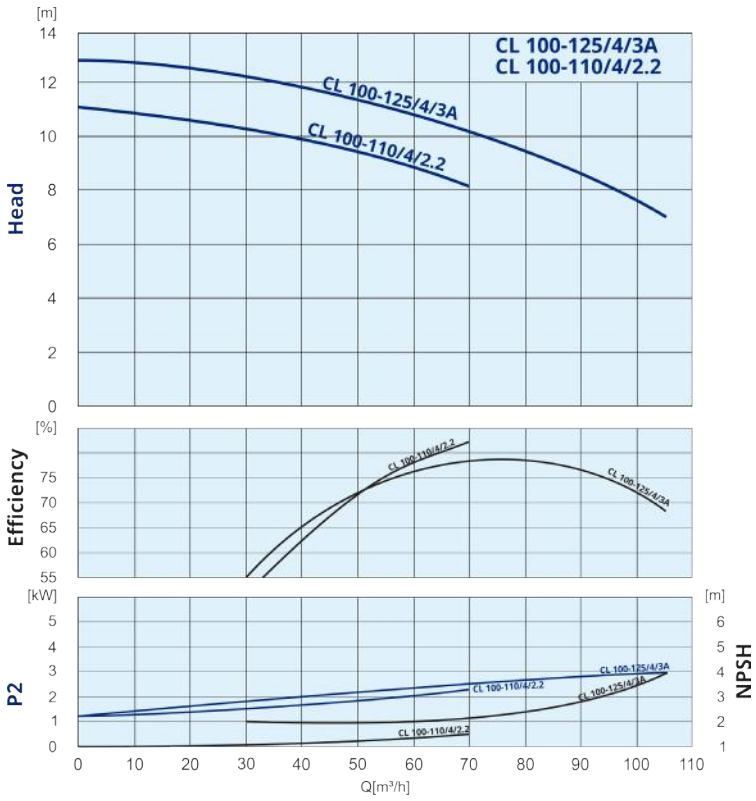
CL 100-85/4/1.5A
Head
Efficiency
P2
NPSH
Q[m³/h]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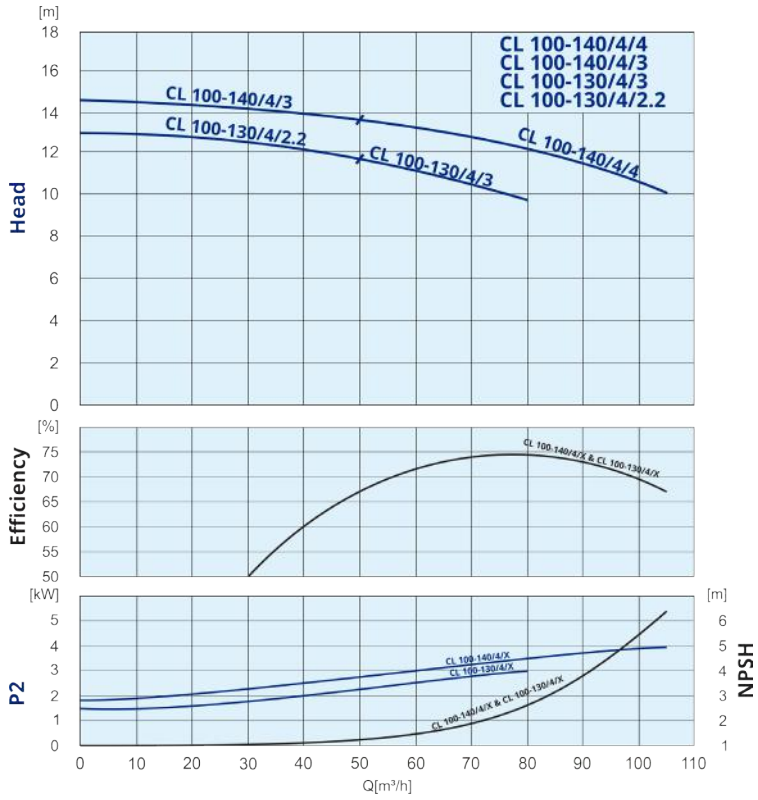
CL 100-125/4/3A
CL 100-110/4/2.2
Head
Efficiency
P2
NPSH
Q[m³/h]


CL 100-140/4/4
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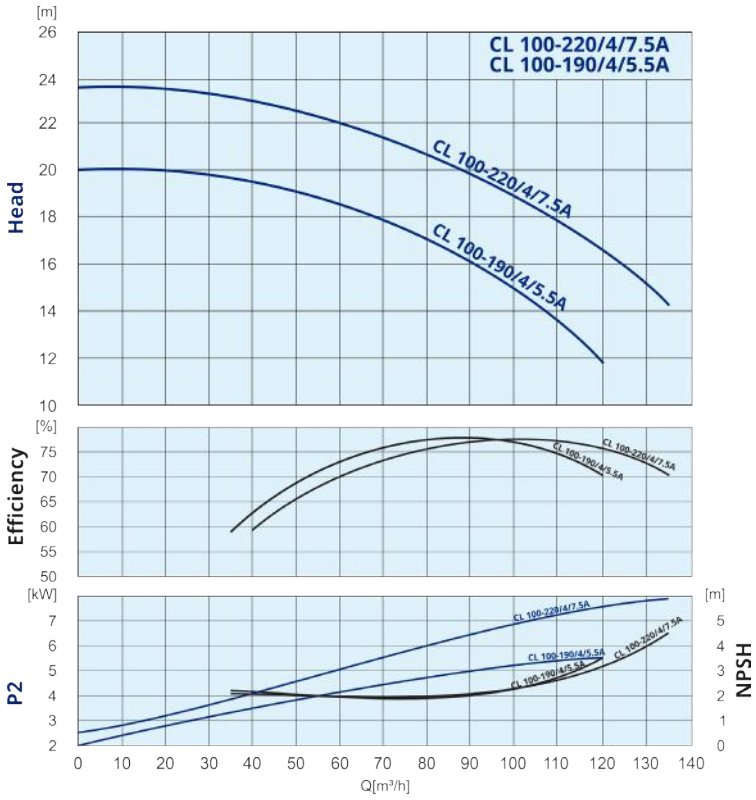
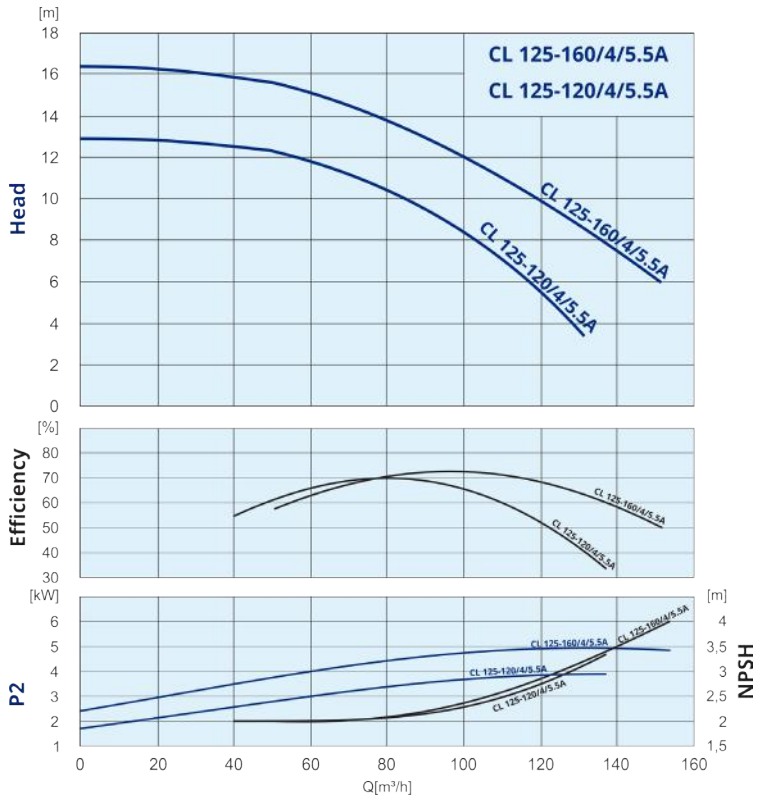
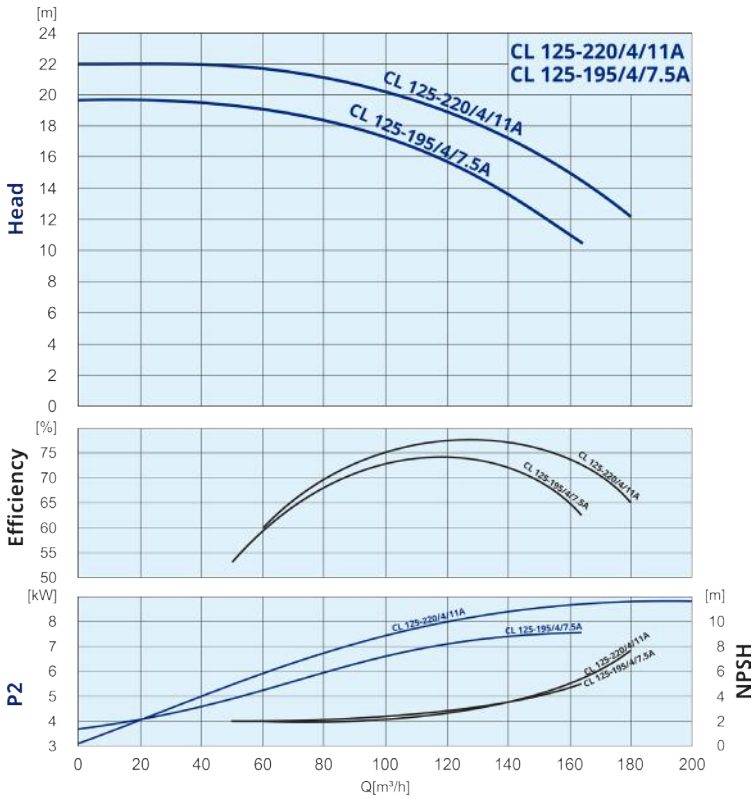
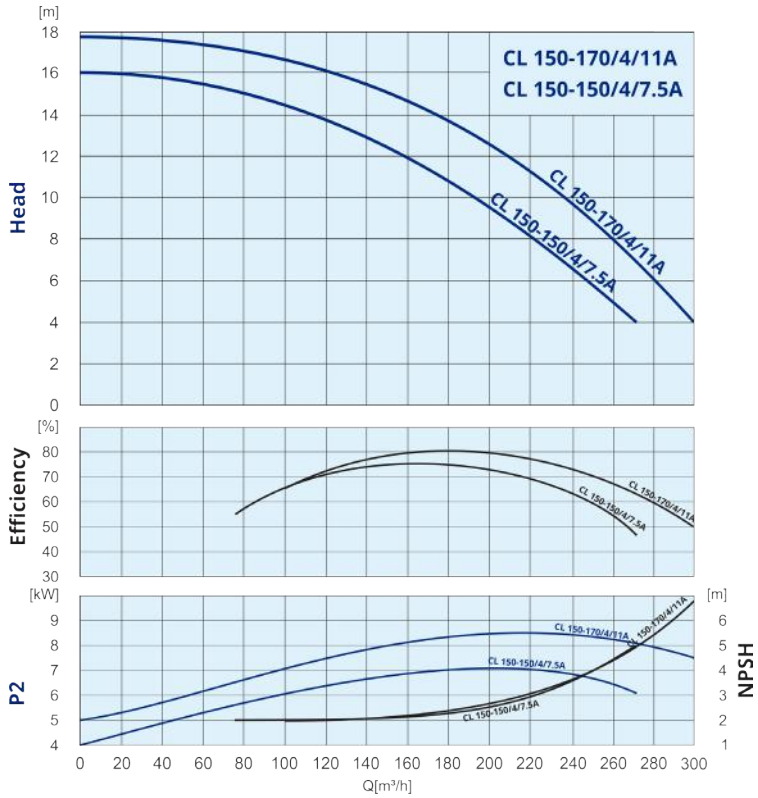
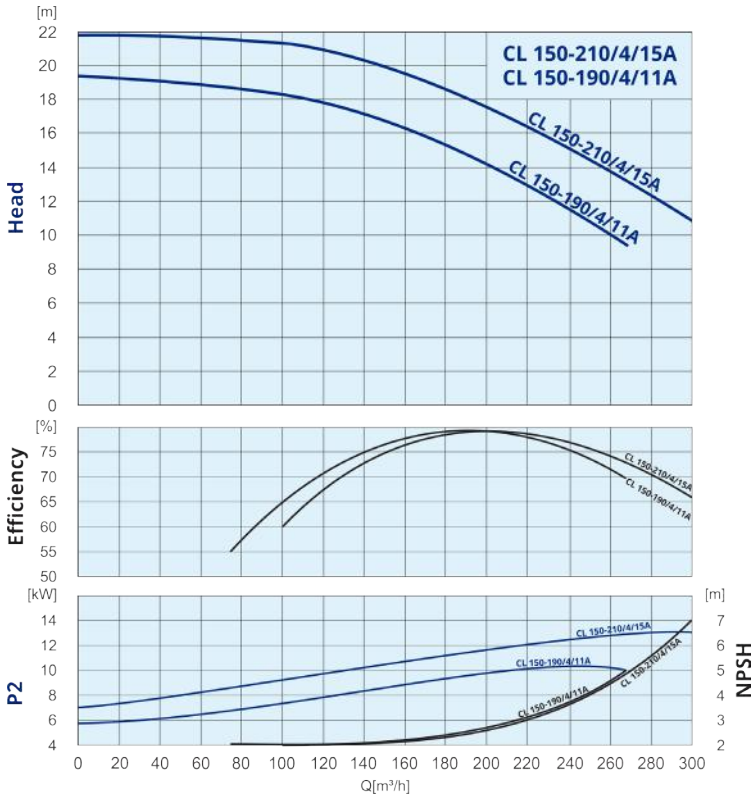
CL 100-130/4/2.2
CL 100-140/4/3
CL 100-130/4/2.2
CL 100-130/4/3
CL 100-140/4/4
Head
Efficiency
P2
NPSH
Q[m³/h]


CL 100-220/4/7.5A
CL 100-190/4/5.5A
CL 100-220/4/7.5A
CL 100-190/4/5.5A
Head
Efficiency
P2
NPSH
Q[m³/h]

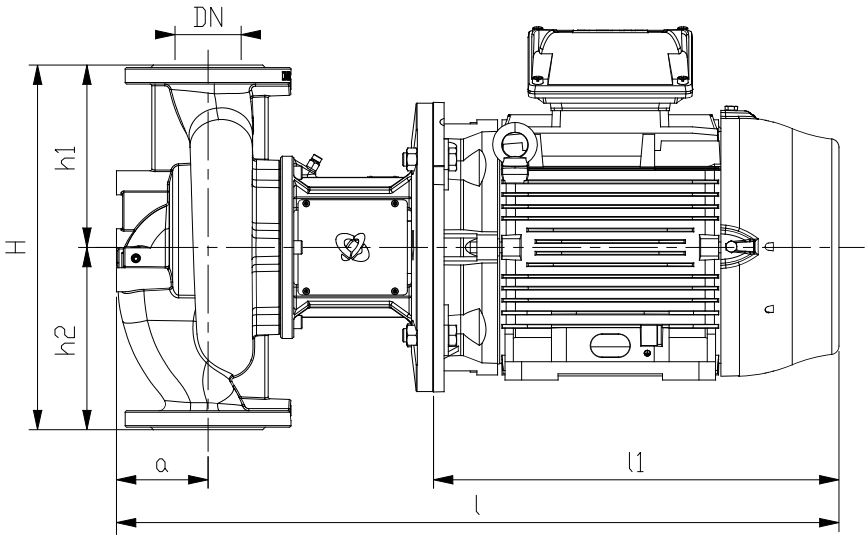

CL 125-160/4/5.5A
CL 125-120/4/5.5A
Head
Efficiency
P2
NPSH
Q[m³/h]

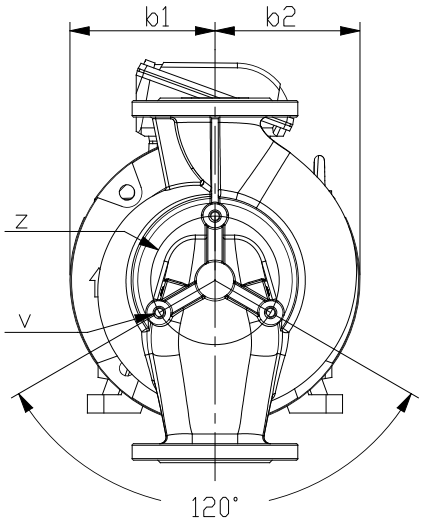

CL 125-220/4/11A
CL 125-195/4/7.5A
Head
Efficiency
P2
NPSH
Q[m³/h]


CL 150-170/4/11A
CL 150-150/4/7.5A
Head
Efficiency
P2
NPSH
Q[m³/h]


CL 150-210/4/15A
CL 150-190/4/11A
Head
Efficiency
P2
NPSH
Q[m³/h]

CL 4 poles - Dimensions





CL 4 poles DN40F

Code	Type	H	h1	h2	DN	a	l	l1	b1	b2	z	v	PN	Kg
979522774	CL 40-60/4/0.55	340	160	180	40	90	479	234	113	106	/	/	16	22
979522606	CL 40-90/4/0.55	360	180	180	40	90	479	234	133	127	/	/	16	39
979521582	CL 40-110/4/0.75	390	190	100	40	90	502	249	145	135	/	/	16	41
979525115	CL 40-130/4/0.75A	380	180	200	40	100	446	/	127	139	/	/	10	32
979522775	CL 40-140/4/1.1	390	190	200	40	90	502	249	145	135	/	/	16	45
979525114	CL 40-190/4/1.1A	440	210	230	40	100	481	/	165	148	/	/	10	55
979525113	CL 40-220/4/1.5A	440	210	230	40	100	481	/	165	148	/	/	10	52

CL 4 poles DN50F

Code	Type	H	h1	h2	DN	a	l	l1	b1	b2	z	v	PN	Kg
979525118	CL 50-40/4/0.25A	322	140	182	50	110	439	/	103	112	/	/	10	21
979522776	CL 50-50/4/0.55	340	160	180	50	96	489	234	240	107	/	/	16	42
979521591	CL 50-70/4/0.55	380	180	200	50	96	504	249	138	126	/	/	16	39
979522777	CL 50-80/4/1.1	380	180	200	50	96	504	249	138	126	/	/	16	44
979521589	CL 50-100/4/0.75	425	205	220	50	96	529	274	150	135	/	/	16	40
979521588	CL 50-110/4/0.75	425	205	220	50	96	529	274	150	135	/	/	16	47,5
979521587	CL 50-110/4/1.1	425	205	220	50	96	529	274	150	135	/	/	16	44
979521586	CL 50-120/4/0.75	425	205	220	50	96	529	274	150	135	/	/	16	40
979521585	CL 50-120/4/1.1	425	205	220	50	96	529	274	150	135	/	/	16	44
979521584	CL 50-140/4/0.75	425	205	220	50	96	529	274	150	135	/	/	16	44
979522778	CL 50-140/4/1.5	425	205	220	50	96	529	274	150	135	/	/	16	47
979525117	CL 50-180/4/1.5A	440	210	230	50	125	506	/	165	148	/	/	10	53
979525116	CL 50-220/4/2.2A	440	210	230	50	125	545	/	165	155	/	/	10	57

CL 4 poles DN65F

Code	Type	H	h1	h2	DN	a	l	l1	b1	b2	z	v	PN	Kg
979522771	CL 65-50/4/0.55	390	180	210	65	95	493	234	135	110	/	/	16	39
979521617	CL 65-70/4/0.75	420	200	220	65	95	508	249	138	125	/	/	16	44
979525123	CL 65-80/4/0.75A	400	180	220	65	140	486	/	122	139	/	/	10	34
979522772	CL 65-90/4/0.75	420	200	220	65	95	508	249	138	125	/	/	16	44
979522779	CL 65-90/4/1.1	420	200	220	65	95	508	249	138	125	/	/	16	48
979522773	CL 65-120/4/1.5	480	225	255	65	95	566	307	160	140	/	/	16	55
979525122	CL 65-130/4/1.1A	440	200	240	65	140	521	/	136	148	/	/	10	42
979525121	CL 65-140/4/1.5A	440	200	240	65	140	521	/	136	148	/	/	10	41
979522780	CL 65-150/4/2.2	480	225	255	65	95	566	307	160	140	/	/	16	60
979525120	CL 65-180/4/2.2A	475	225	250	65	140	560	/	165	155	/	/	10	67
979525119	CL 65-220/4/3.0A	475	225	250	65	140	594	/	165	155	/	/	10	68

CL 4 poles DN80F

Code	Type	H	h1	h2	DN	a	l	l1	b1	b2	z	v	PN	Kg
979521599	CL 80-40/4/0.55	440	200	240	80	103	520	249	158	124	/	/	16	46
979522764	CL 80-40/4/0.75	440	200	240	80	103	520	249	158	124	/	/	16	47
979521596	CL 80-60/4/0.75	440	200	240	80	103	520	249	158	124	/	/	16	47
979522781	CL 80-60/4/1.1	440	200	240	80	103	520	249	158	124	/	/	16	51
979522765	CL 80-60/4/1.5	440	200	240	80	103	520	249	158	124	/	/	16	53
979522766	CL 80-80/4/1.5	480	220	260	80	103	578	307	172	138	/	/	16	61
979522767	CL 80-80/4/2.2	480	220	260	80	103	578	307	172	138	/	/	16	66
979522782	CL 80-90/4/2.2	480	220	260	80	103	578	307	172	138	/	/	16	66
979522768	CL 80-100/4/1.5	530	245	285	80	103	578	307	183	148	/	/	16	67
979522769	CL 80-100/4/2.2	530	245	285	80	103	578	307	183	148	/	/	16	72
979521595	CL 80-110/4/2.2	530	245	285	80	103	578	307	183	148	/	/	16	72
979522770	CL 80-120/4/2.2	530	245	285	80	103	578	307	183	148	/	/	16	72
979525126	CL 80-130/4/2.2A	500	225	275	80	160	580	/	146	155	/	/	10	52
979521594	CL 80-140/4/2.2	530	245	285	80	103	578	307	183	148	/	/	16	72
979522783	CL 80-140/4/3.0	530	245	285	80	103	578	307	183	148	/	/	16	79,5
979525125	CL 80-200/4/4.0A	530	250	280	80	160	614	/	168	171	/	/	10	83
979525124	CL 80-230/4/5.5A	530	250	280	80	160	651	/	168	195	/	/	10	107

CL 4 poles DN100F

Code	Type	H	h1	h2	DN	a	l	l1	b1	b2	z	v	PN	Kg
979525131	CL 100-85/4/1.5A	525	225	300	100	190	571	/	136	148	/	/	10	46
979525130	CL 100-100/4/2.2A	525	225	300	100	190	610	/	136	155	/	/	10	51
979521603	CL 100-110/4/2.2	560	270	290	100	113	602	320	187	152	/	/	16	72
979525129	CL 100-125/4/3.0A	550	250	300	100	190	656	/	156	155	/	/	10	68
979521602	CL 100-130/4/2.2	560	270	290	100	113	602	320	187	152	/	/	16	72
979521601	CL 100-130/4/3.0	560	270	290	100	113	602	320	187	152	/	/	16	74
979521600	CL 100-140/4/3.0	560	270	290	100	113	602	320	187	152	/	/	16	74
979522785	CL 100-140/4/3.0	560	270	290	100	113	602	320	187	152	/	/	16	80
979525128	CL 100-190/4/5.5A	600	280	320	100	190	701	/	176	195	/	/	10	109
979525127	CL 100-220/4/7.5A	600	280	320	100	190	714	/	176	195	/	/	10	119

CL 4 poles DN125F

Code	Type	H	h1	h2	DN	a	l	l1	b1	b2	z	v	PN	Kg
979524645	CL 125-120/4/5.5A	620	280	340	125	195	706	/	195	195	/	/	10	145
979524506	CL 125-160/4/5.5A	620	280	340	125	195	706	/	195	195	/	/	10	145
979523643	CL 125-195/4/7.5A	620	280	340	125	195	746	/	195	195	/	/	10	148
979525132	CL 125-220/4/11.0A	620	280	340	125	195	839	/	195	238	/	/	10	188

CL 4 poles DN150F

Code	Type	H	h1	h2	DN	a	l	l1	b1	b2	z	v	PN	Kg
979525133	CL 150-150/4/7.5A	700	330	370	150	220	802	/	210	195	/	/	10	167
979525134	CL 150-170/4/11.0A	700	330	370	150	220	859	/	210	195	/	/	10	208
979525135	CL 150-190/4/11.0A	700	330	370	150	220	859	/	210	195	/	/	10	196
979525137	CL 150-210/4/15.0A	700	330	370	150	220	939	/	210	238	/	/	10	227

CLD 2 poles - Q/H performance

CLD 2 poles DN40F

Code	Type	P [kW]	I [A]		Q [m³/h]													
					6	9	12	13,5	15	18	21	24	27	30	36	42	48	54
979523539	CLD 40-140/2/0.75A	0,75	1,6	H [m]	12,5	10,5	8,1	6,8	5,2									
979525098	CLD 40-170/2/0.75A	0,75	1,6		16,5	14,5	12,3	11	9,5	6								
979525099	CLD 40-220/2/1.1A	1,1	2,5		20,5	19	17	16	15	11,5	7,5							
979525100	CLD 40-250/2/1.5A	1,5	3,4		24,5	23,5	22	21	20	16,5	13							

CLD 2 poles DN50F

Code	Type	P [kW]	I [A]		Q [m³/h]													
					9	12	13,5	15	18	21	24	27	30	36	42	48	54	60
979524015	CLD 50-170/2/1.5A	1,5	3,4	H [m]				15,5	15	14,1	13	11,8	10,5	7				
979525101	CLD 50-200/2/2.2A	2,2	4,6					19	18,5	17,5	16,5	15,5	14,5	10,5				
979524572	CLD 50-250/2/3.0A	3,0	5,6					24,5	24	23,5	23	22	20,5	17				
979525102	CLD 50-310/2/3.0/A	3,0	5,6					30	29	28	26,5	25	23	18				
979525103	CLD 50-370/2/4.0A	4,0	8,2					36,5	35,5	34,5	33,5	32,5	31	27				

CLD 2 poles DN65F

Code	Type	P [kW]	I [A]		Q [m³/h]													
					13,5	15	18	21	24	27	30	36	42	48	54	60	75	90
979523448	CLD 65-240/2/3.0A	3,0	5,6	H [m]				23	22,5	22	21,5	19,8	17,5	15				
979524016	CLD 65-270/2/4.0A	4,0	8,2						26,5	26	25,5	24,3	22,6	20,2	18			
979525104	CLD 65-330/2/5.5A	5,5	10,2						32,5	32	31,5	30,5	29,5	28	26	23,5		
979525105	CLD 65-370/2/7.5A	7,5	14,4						37	36,5	36	35	34	32,5	31	29		

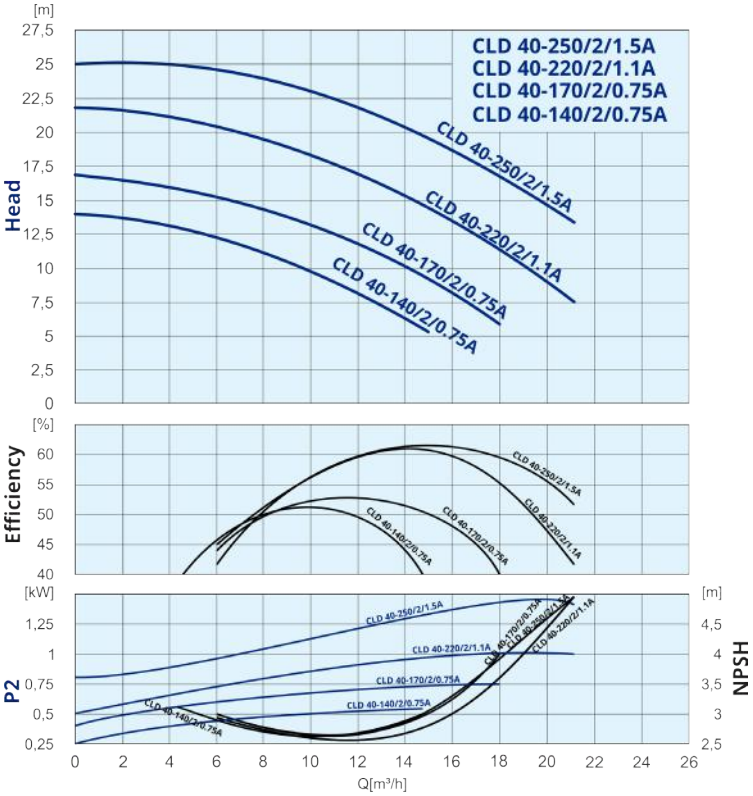
CLD 2 poles DN80F

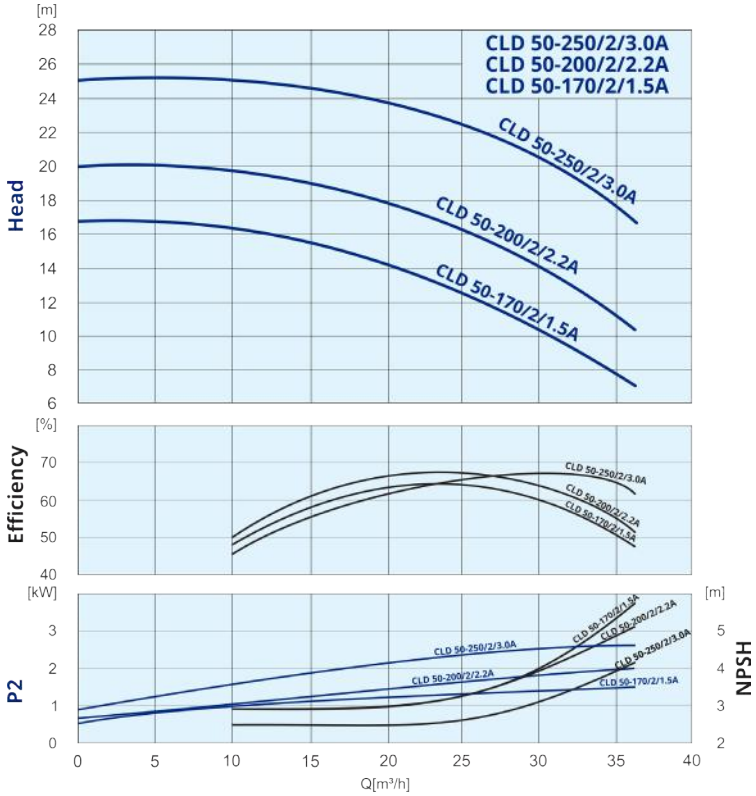
Code	Type	P [kW]	I [A]		Q [m³/h]													
					30	36	42	48	54	60	75	90	105	120	135	150	165	180
979523476	CLD 80-260/2/7.5A	7,5	14,4	H [m]			25,3	24,9	24,1	23,4	20,5	17	12,7					
979523821	CLD 80-310/2/11.0A	11,0	2,5				30,5	30	29,5	29	26,5	24	20,5	16				
979525106	CLD 80-370/2/15.0A	15,0	26,8				36,5	36	35,5	34,5	33	30	27	23	19			
979523728	CLD 80-420/2/15.0A	15,0	26,8				41	40,5	40	39,5	38	35,5	33	29	24			

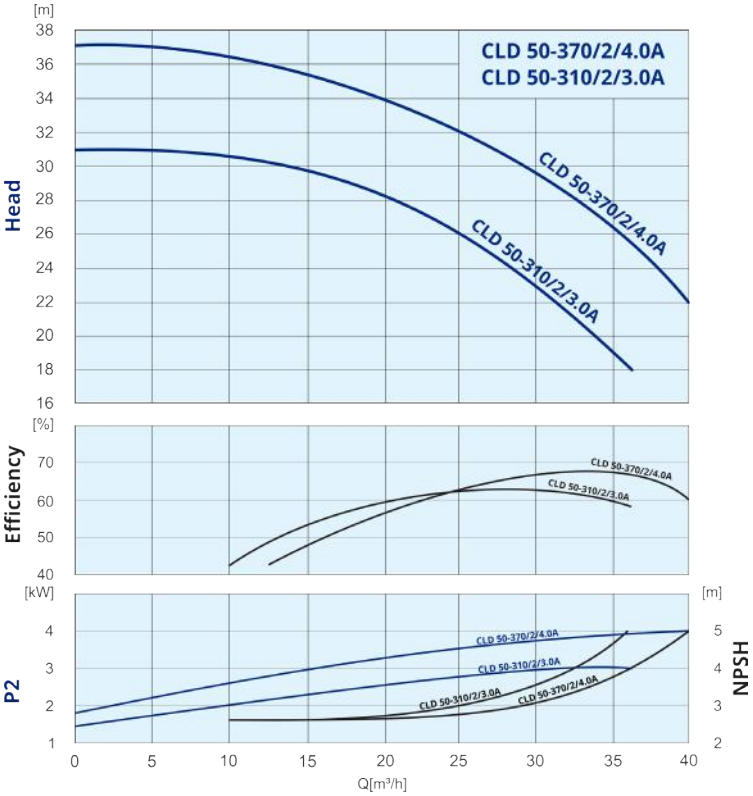
CLD 2 poles DN100F

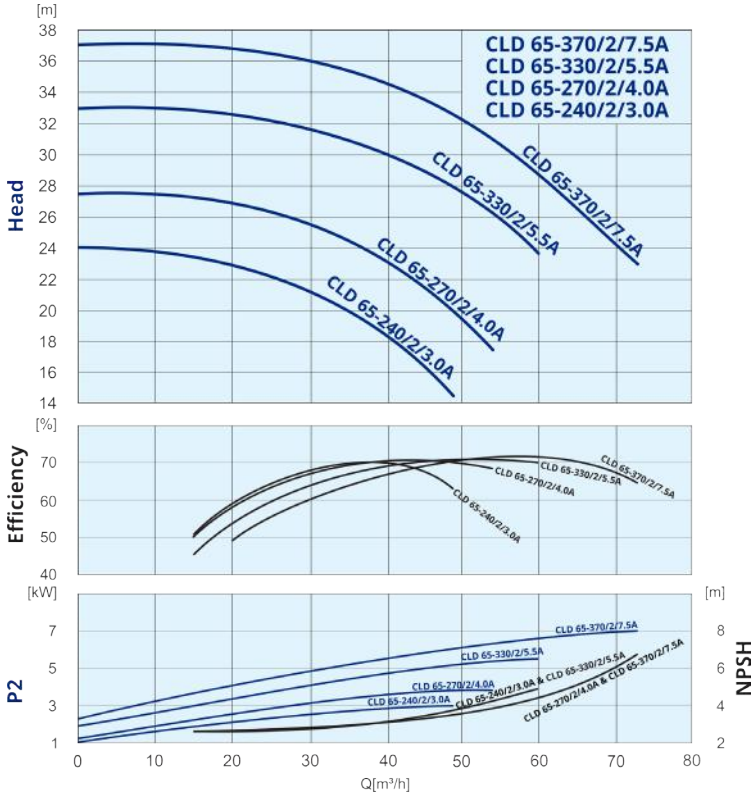
Code	Type	P [kW]	I [A]		Q [m³/h]													
					54	60	75	90	105	120	135	150	165	180	195	210	225	240
979523704	CLD 100-255/2/11.0A	11,0		H [m]		33	32,3	31	29	27	24,5	22	19					
979525109	CLD 100-285/2/15.0A	15,0					37,5	36,5	35	33	31	28,5	26					
979525110	CLD 100-290/2/15.0A	15,0				24,5	23,5	22	20,5	18,5	16	13,5	10,5	7	3			
979525111	CLD 100-315/2/15.0A	15,0				27,5	26,5	25,5	24	22	20	17,5	15	12	8,6	5		
979525107	CLD 100-340/2/15.0A	15,0	26,8				28	27	25,5	23,5	21,5	19	16,5	13,8	10,8	7,5	3	
979525108	CLD 100-390/2/15.0A	15,0	26,8					29	28	26	24,5	22	20	17,5	14	11,3	7,5	3,5

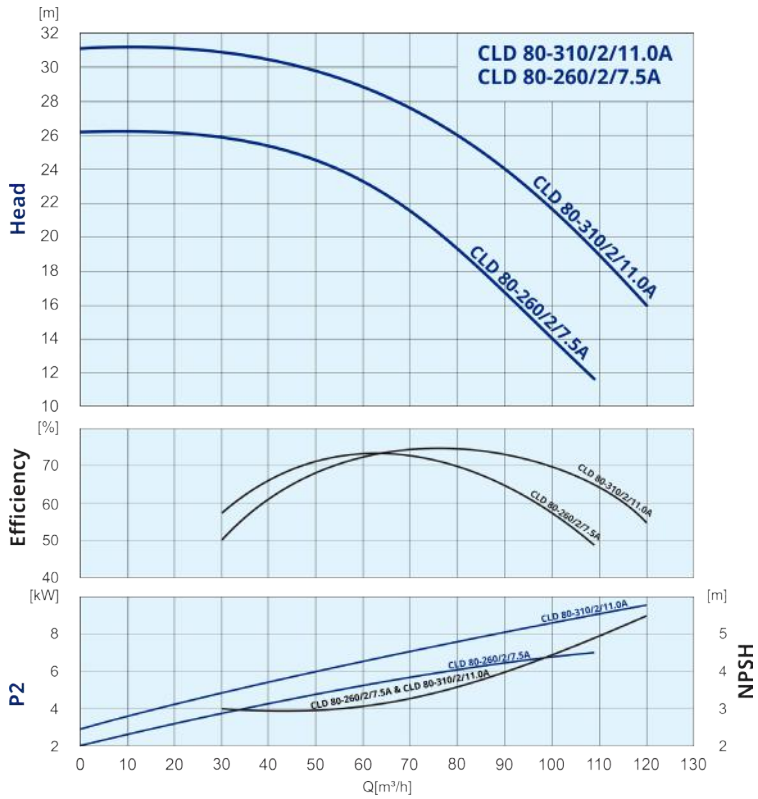
CLD 2 poles - Performance curves







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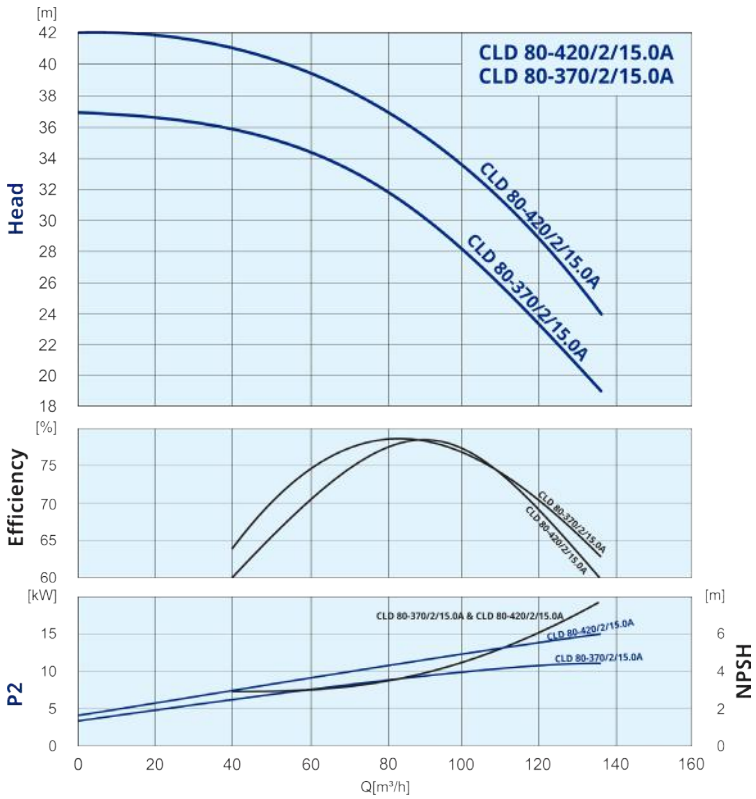
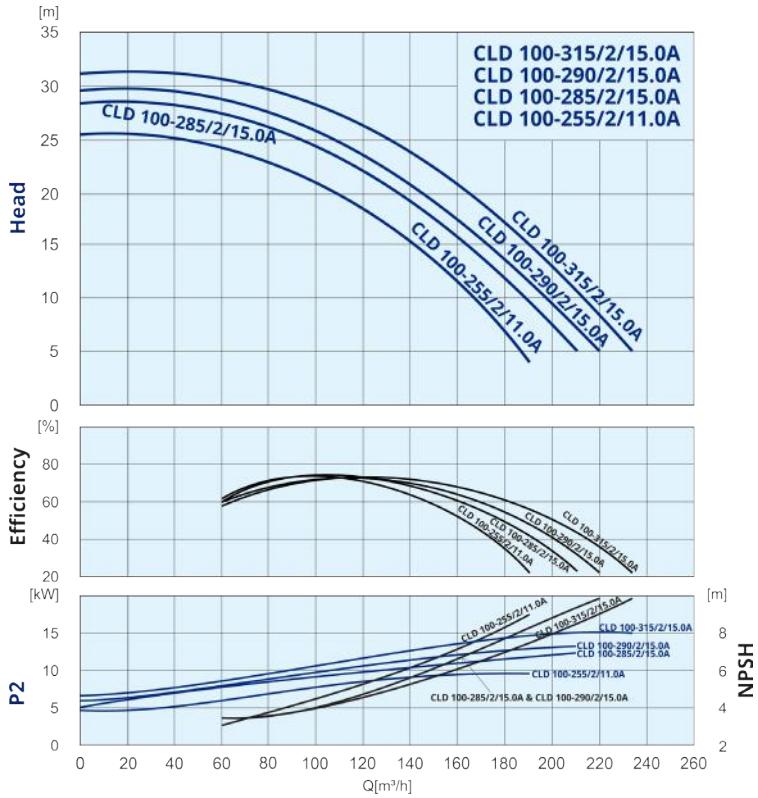
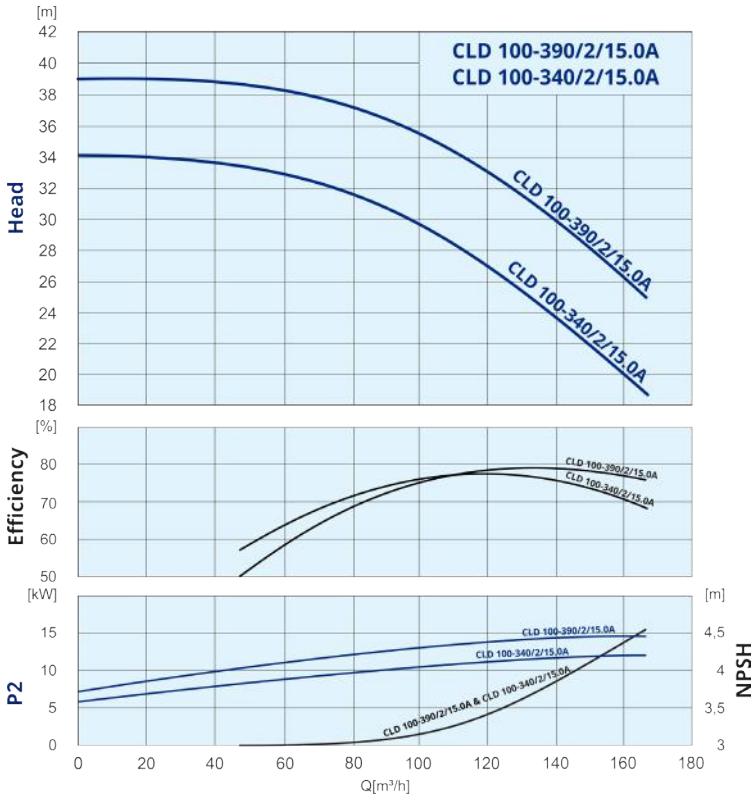
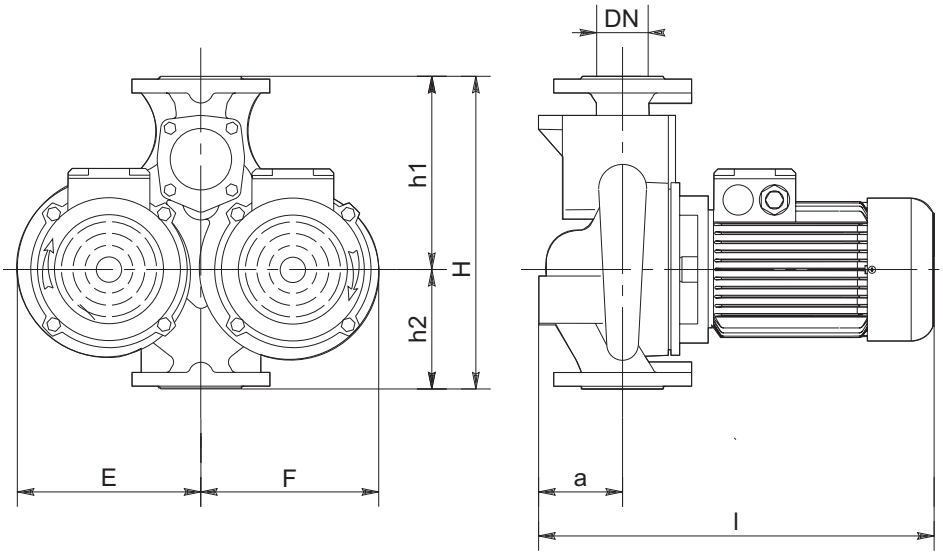
CLD 80-260/2/7.5A
CLD 80-310/2/11.0A
CLD 80-260/2/7.5A
CLD 80-260/2/7.5A & CLD 80-310/2/11.0A
Head
Efficiency
P2
NPSH
Q[m³/h]


CLD 80-420/2/15.0A
CLD 80-370/2/15.0A
CLD 80-420/2/15.0A
CLD 80-370/2/15.0A
CLD 80-370/2/15.0A & CLD 80-420/2/15.0A
Head
Efficiency
P2
NPSH
Q[m³/h]


CLD 100-315/2/15.0A
CLD 100-290/2/15.0A
CLD 100-285/2/15.0A
CLD 100-255/2/11.0A
CLD 100-285/2/15.0A
CLD 100-315/2/15.0A
CLD 100-290/2/15.0A
CLD 100-255/2/11.0A
CLD 100-285/2/15.0A & CLD 100-290/2/15.0A
Head
Efficiency
P2
NPSH
Q[m³/h]


CLD 100-390/2/15.0A
CLD 100-340/2/15.0A
CLD 100-390/2/15.0A
CLD 100-340/2/15.0A
CLD 100-390/2/15.0A & CLD 100-340/2/15.0A
Head
Efficiency
P2
NPSH
Q[m³/h]

CLD 2 poles - Dimensions



CLD 2 poles DN40F

Code	Type	H	h1	h2	DN	a	l	b1	b2	PN	Kg
979523539	CLD 40-140/2/0.75A	340	210	130	40	100	425	200	197	16	50
979525098	CLD 40-170/2/0.75A	340	210	130	40	100	425	200	197	16	55
979525099	CLD 40-220/2/1.1A	340	210	130	40	100	445	200	197	16	55
979525100	CLD 40-250/2/1.5A	340	210	130	40	100	445	200	197	16	59

CLD 2 poles DN50F

Code	Type	H	h1	h2	DN	a	l	b1	b2	PN	Kg
979524015	CLD 50-170/2/1.5A	365	220	145	50	110	455	217	210	16	61
979525101	CLD 50-200/2/2.2A	365	220	145	50	110	495	217	210	16	64
979524572	CLD 50-250/2/3.0A	365	220	145	50	110	495	217	210	16	77
979525102	CLD 50-310/2/3.0A	410	240	170	50	110	495	245	235	16	78
979525103	CLD 50-370/2/4.0A	410	240	170	50	110	535	245	235	16	86

CLD 2 poles DN65F

Code	Type	H	h1	h2	DN	a	l	b1	b2	PN	Kg
979523448	CLD 65-240/2/3.0A	450	270	180	65	130	515	275	268	16	92
979524016	CLD 65-270/2/4.0A	450	270	180	65	130	565	275	268	16	101
979525104	CLD 65-330/2/5.5A	450	270	180	65	130	565	275	268	16	112
979525105	CLD 65-370/2/7.5A	450	270	180	65	130	670	275	268	16	118

CLD 2 poles DN80F

Code	Type	H	h1	h2	DN	a	l	b1	b2	PN	Kg
979523476	CLD 80-260/2/7.5A	510	305	205	80	150	690	280	270	16	141
979523821	CLD 80-310/2/11.0A	510	305	205	80	150	690	280	270	16	188
979525106	CLD 80-370/2/15.0A	510	305	205	80	150	690	280	270	16	193
979523728	CLD 80-420/2/15.0A	510	305	205	80	150	640	280	270	16	189

CLD 2 poles DN100F

Code	Type	H	h1	h2	DN	a	l	b1	b2	PN	Kg
979523704	CLD 100-255/2/11.0A	630	390	240	100	180	720	325	345	16	226
979525109	CLD 100-285/2/15.0A	630	390	240	100	180	720	325	345	16	232
979525110	CLD 100-290/2/15.0A	630	390	240	100	180	720	325	345	16	232
979525111	CLD 100-315/2/15.0A	630	390	240	100	180	720	325	345	16	232
979525107	CLD 100-340/2/15.0A	630	390	240	100	180	720	325	345	16	232
979525108	CLD 100-390/2/15.0A	630	390	240	100	180	720	325	345	16	232

CLD 4 poles - Q/H performance

CLD 4 poles DN40F

Code	Type	P [kW]	I [A]		Q [m³/h]													
					1,8	2,4	3	4,5	6	7,5	9	10,5	12	13,5	15	18	21	24
979525138	CLD 40-40/4/0.25A	0,25	0,9	H [m]	3,8	3,7	3,6	3,15	2,6	1,9								
979525139	CLD 40-50/4/0.25A	0,25	0,9			4,6	4,5	4,1	3,6	3,0	2,2							
979525140	CLD 40-65/4/0.25A	0,25	0,9				6,2	6,0	5,8	5,2	4,5	3,9	3,0					

CLD 4 poles DN50F

Code	Type	P [kW]	I [A]		Q [m³/h]													
					3	4,5	6	7,5	9	10,5	12	13,5	15	18	21	24	27	30
979525141	CLD 50-50/4/0.25A	0,25	0,9	H [m]			4,6	4,5	4,3	4,1	3,9	3,6	3,3	2,4				
979525142	CLD 50-65/4/0.37A	0,37	1,2				6,3	6,2	6,1	6,0	5,8	5,5	5,2	4,6	3,0			
979525143	CLD 50-90/4/0.55A	0,55	1,6				8,8	8,6	8,3	8,0	7,7	7,3	6,9	5,9	4,5			

CLD 4 poles DN65F

Code	Type	P [kW]	I [A]		Q [m³/h]													
					9	10,5	12	13,5	15	18	21	24	27	30	36	42	48	54
979525144	CLD 65-70/4/0.75A	0,75	1,9	H [m]			6,7	6,6	6,4	6,1	5,7	5,1	4,3	3,3				
979525145	CLD 65-80/4/0.75A	0,75	1,9				8,2	8,0	7,9	7,7	7,4	7,0	6,6	6,0	4,0			
979523513	CLD 65-90/4/1.1A	1,1	3,5				9,0	8,9	8,8	8,6	8,4	8,1	7,7	7,2	5,5			

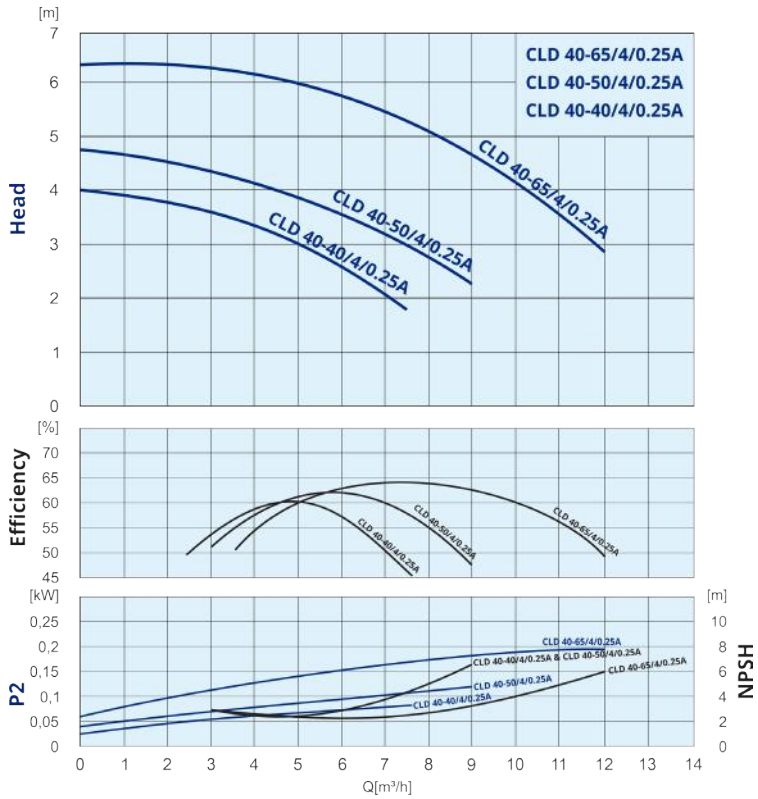
CLD 4 poles DN80F

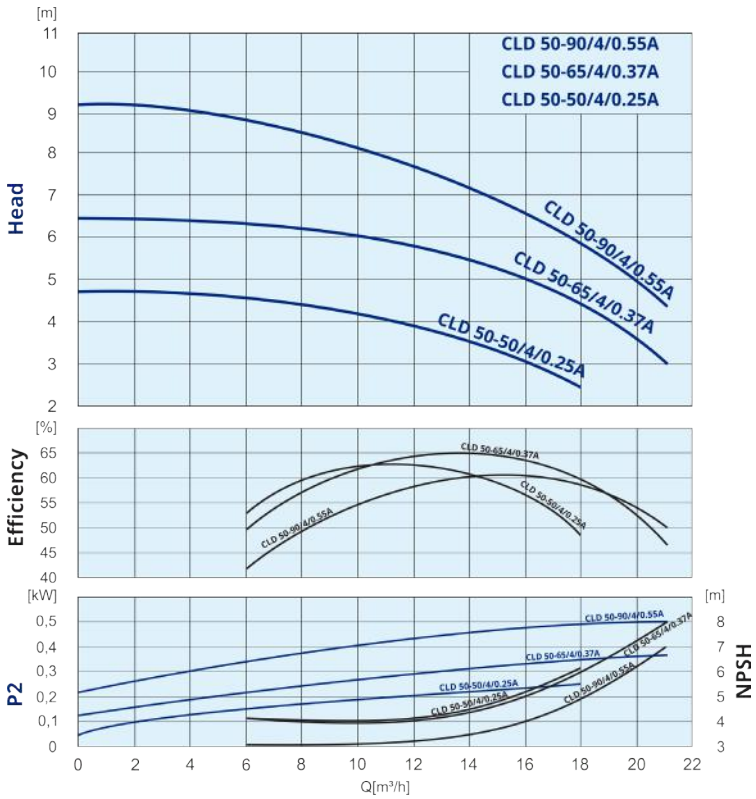
Code	Type	P [kW]	I [A]		Q [m³/h]													
					13,5	15	18	21	24	27	30	36	42	48	54	60	66	72
979525146	CLD 80-65/4/0.75A	0,75	1,9	H [m]			6,3	6,2	6,1	5,9	5,6	4,9	4,1	3,2				
979525147	CLD 80-75/4/1.1A	1,1	3,5				7,3	7,2	7,1	7,0	6,8	6,3	5,6	4,8	3,9			
979525148	CLD 80-85/4/1.1A	1,1	3,5				8,6	8,5	8,4	8,3	8,2	8,0	7,5	6,8	6,0	5,0		
979523511	CLD 80-105/4/1.5A	1,5	3,4				10,2	10,1	10,0	9,9	9,8	9,4	9,0	8,5	7,7	6,5		

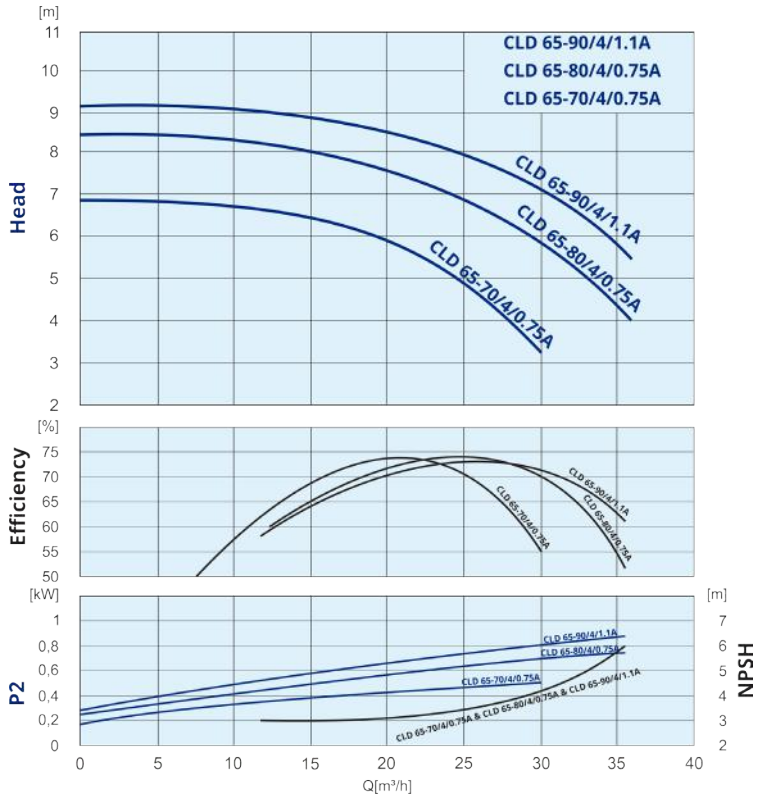
CLD 4 poles DN100F

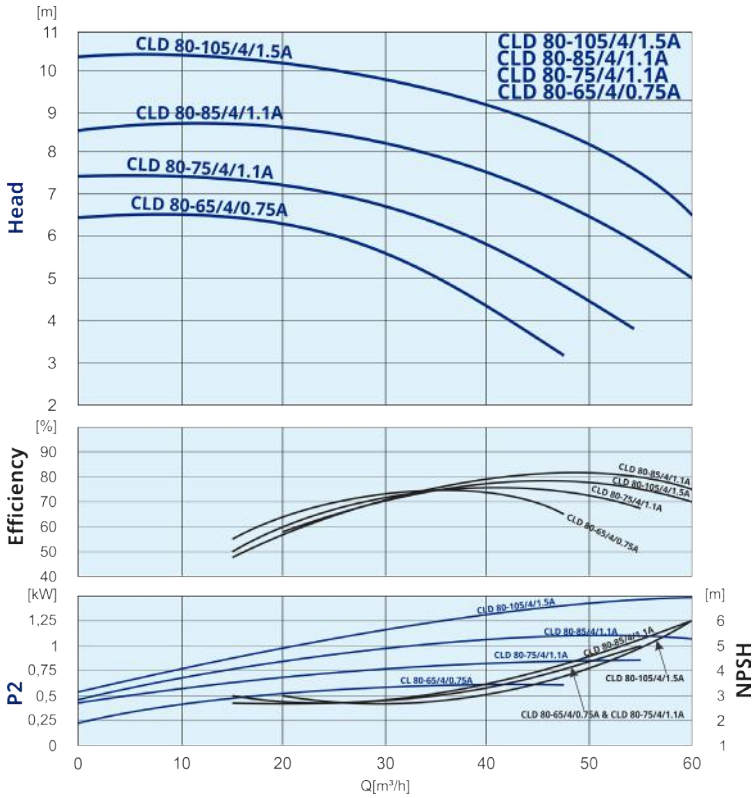
Code	Type	P [kW]	I [A]		Q [m³/h]													
					24	27	30	36	42	48	54	60	66	72	78	90	105	120
979523621	CLD 100-85/4/1.5A	1,5	3,4	H [m]			8,2	7,8	7,4	7,0	6,5	6,0	5,3	4,6	4,0			
979525149	CLD 100-105/4/2.2A	2,2	4,8					10,0	9,7	9,3	8,9	8,5	8,0	7,5	7,0	6,0		
979525150	CLD 100-125/4/3.0A	3,0	6,8					12,0	11,7	11,5	11,3	11,0	10,5	10,0	9,5	8,5	7,0	
979525151	CLD 100-150/4/4.0A	4,0	8,2					14,5	14,2	14,0	13,8	13,5	13,1	12,7	12,2	11,0	9,0	6,5

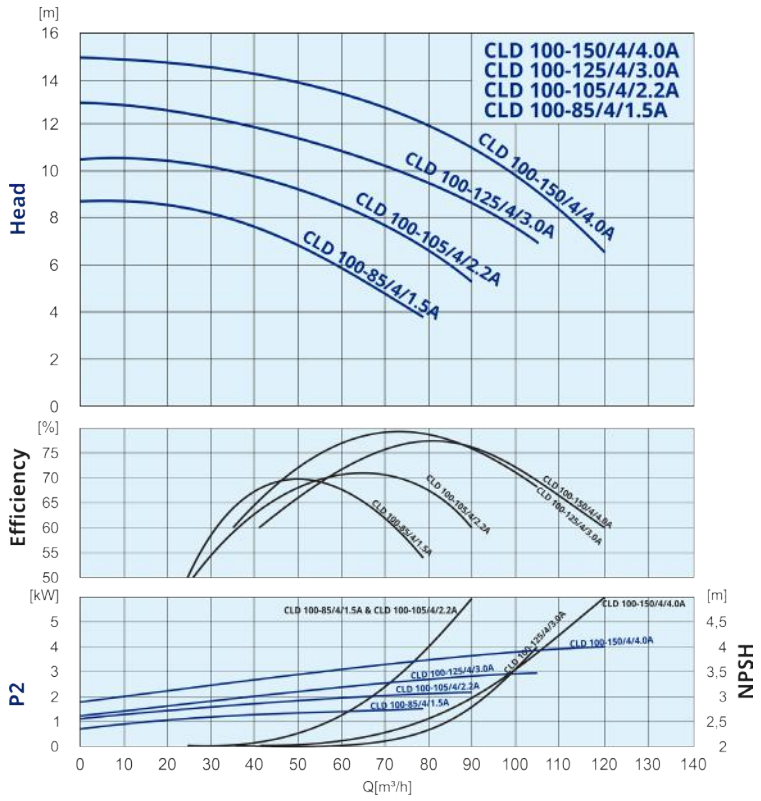
CLD 4 poles - Performance curves



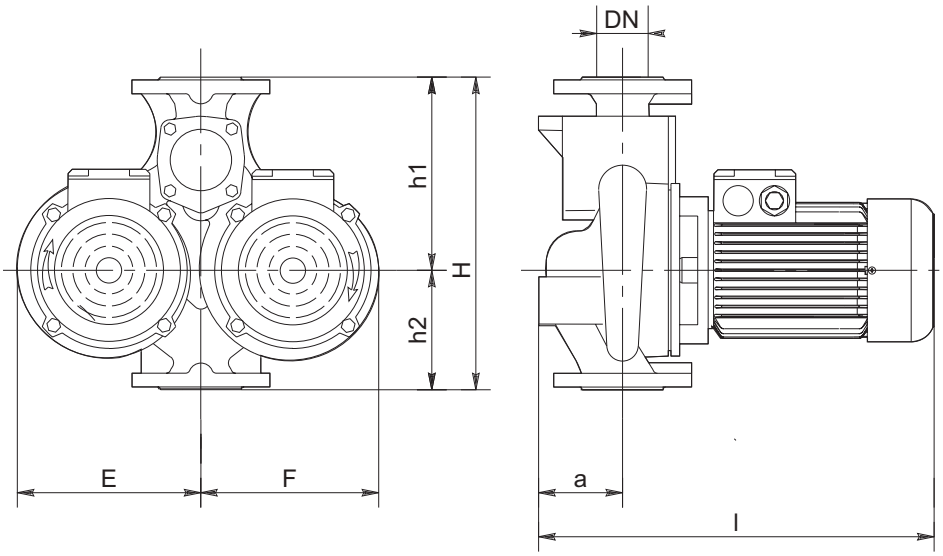








CLD 4 poles - Dimensions



CLD 4 poles DN40F

Code	Type	H	h1	h2	DN	a	l	b1	b2	PN	Kg
979525138	CLD 40-40/4/0.25A	340	210	130	40	100	430	200	197	10	44
979525139	CLD 40-50/4/0.25A	340	210	130	40	100	430	200	197	10	44
979525140	CLD 40-65/4/0.25A	340	210	130	40	100	430	200	197	10	44

CLD 4 poles DN50F

Code	Type	H	h1	h2	DN	a	l	b1	b2	PN	Kg
979525141	CLD 50-50/4/0.25A	365	220	145	50	110	440	200	197	10	53
979525142	CLD 50-65/4/0.37A	365	220	145	50	110	440	200	197	10	47
979525143	CLD 50-90/4/0.55A	410	240	170	50	110	440	245	235	10	46

CLD 4 poles DN65F

Code	Type	H	h1	h2	DN	a	l	b1	b2	PN	Kg
979525144	CLD 65-70/4/0.75A	450	270	180	65	130	460	275	268	10	66
979525145	CLD 65-80/4/0.75A	450	270	180	65	130	476	275	268	10	68
979523513	CLD 65-90/4/1.1A	450	270	180	65	130	511	275	268	10	79

CLD 4 poles DN80F

Code	Type	H	h1	h2	DN	a	l	b1	b2	PN	Kg
979525146	CLD 80-65/4/0.75A	510	305	205	80	150	496	280	270	10	75
979525147	CLD 80-75/4/1.1A	510	305	205	80	150	531	280	270	10	86
979525148	CLD 80-85/4/1.1A	510	305	205	80	150	531	280	270	10	86
979523511	CLD 80-105/4/1.5A	510	305	205	80	150	531	280	270	10	86

CLD 4 poles DN100F

Code	Type	H	h1	h2	DN	a	l	b1	b2	PN	Kg
979523621	CLD 100-85/4/1.5A	630	390	240	100	180	573	325	345	10	133
979525149	CLD 100-105/4/2.2A	630	390	240	100	180	612	325	345	10	143
979525150	CLD 100-125/4/3.0A	630	390	240	100	180	646	325	345	10	154
979525151	CLD 100-150/4/4.0A	630	390	240	100	180	634	325	345	10	169

ECL(D) - version with frequency converter

Advantages:
- Energy saving
- Compact design
- Easy to use
- Programable to suit the system requrements
- Reliability

Construction:
- Pump
- Motor
- Frequency converter Danfoss or Omron- Hitachi

Main features
- Protecion against dry running
- Protection against overcurrent in the motor
- Protection agains overvoltage and undervoltage of the power supply
- Protection against current unbalances between phases

All ECL(D) pumps are based on CL(D) pumps, so all technical data from CL(D) pumps is also valid for ECL(D) pumps. Because of that we will not duplicate the data but we will explain to you different options of regulation with frequency converters.

Operational options

Constant pressure
In this mode, the system maintains the preset pressure when the flow required by the installation changes.

Constant speed
with setting of the speed preferential rotation.
In this mode, by changing the working frequency, you may choose any operational curve included within the working range.

Integrated frequency converter Danfoss RBS
0,55-7,5kW; with Modbus & sensorless pressure control
Example: ECL(D) 40-170/2/0.75A/I-D-RBS

OPTIONAL:
Control panel LCP 102
(code: 5551492)

Integrated frequency converter Danfoss ZS
0,55-7,5kW; with Modbus & analog input 0-10V
Example: ECL(D) 40-170/2/0.75A/I-D-ZS

Integrated frequency converter Danfoss 2xTT
0,55-7,5kW; with Modbus & 2x pressure sensor
Example: ECL(D) 40-170/2/0.75A/I-D-2xTT

Integrated frequency converter Danfoss DTT
0,55-7,5kW; with Modbus & differential pressure transmitter
Example: ECL(D) 40-170/2/0.75A/I-D-DTT

Separated frequency converter Hitachi Omron ZS
0,75-37kW; with Modbus & analog input 0-10V
Example: ECL(D) 40-170/2/0.75A/L-H-ZS

Separated frequency converter Hitachi Omron DTSR
0,75-37kW; with Modbus & differential pressure switch
max. dif. head 6bar; media temperature max. +80°C*
Example: ECL(D) 40-170/2/0.75A/L-H-DTSR

Separated frequency converter Hitachi Omron DTT
0,75-37kW; with Modbus & differential pressure transmitter
max. dif. head 6bar; media temperature max. +70°C*
Example: ECL(D) 40-170/2/0.75A/L-H-DTT

***can be customised for higher temperatures/pressures**

ECL 2 poles

ECL 2 poles DN 40F

Type	FC Danfoss ...I-D-RBS	FC Danfoss ...I-D-ZS	FC Danfoss ...I-D-2xTT	FC Danfoss ...I-D-DTT	FC Hitachi ...L-H-ZS	FC Hitachi ...L-H-DTSR	FC Hitachi ...L-H-DTT
ECL 40-170/2/0.75A/...	YES	YES	YES	YES	YES	YES	YES
ECL 40-220/2/1.1A/...	YES	YES	YES	YES	YES	YES	YES
ECL 40-250/2/1.5A/...	YES	YES	YES	YES	YES	YES	YES
ECL 40-290/2/2.2A/...	YES	YES	YES	YES	YES	YES	YES
ECL 40-350/2/4.0/...	YES	YES	YES	YES	YES	YES	YES
ECL 40-380/2/3.0A/...	YES	YES	YES	YES	YES	YES	YES
ECL 40-430/2/5.5/...	YES	YES	YES	YES	YES	YES	YES
ECL 40-470/2/4.0A/...	YES	YES	YES	YES	YES	YES	YES
ECL 40-530/2/7.5/...	YES	YES	YES	YES	YES	YES	YES
ECL 40-550/2/5.5A/...	YES	YES	YES	YES	YES	YES	YES
ECL 40-600/2/5.5/...	YES	YES	YES	YES	YES	YES	YES
ECL 40-625/2/7.5A/...	YES	YES	YES	YES	YES	NO	NO
ECL 40-630/2/11.0/...	NO	NO	NO	NO	YES	NO	NO
ECL 40-680/2/7.5A/...	YES	YES	YES	YES	YES	NO	NO
ECL 40-830/2/11.0A/...	NO	NO	NO	NO	YES	NO	NO
ECL 40-920/2/15.0A/...	NO	NO	NO	NO	YES	NO	NO

ECL 2 poles DN50F

Type	FC Danfoss ...I-D-RBS	FC Danfoss ...I-D-ZS	FC Danfoss ...I-D-2xTT	FC Danfoss ...I-D-DTT	FC Hitachi ...L-H-ZS	FC Hitachi ...L-H-DTSR	FC Hitachi ...L-H-DTT
ECL 50-160/2/1.1/...	YES	YES	YES	YES	YES	YES	YES
ECL 50-170/2/1.5A/...	YES	YES	YES	YES	YES	YES	YES
ECL 50-190/2/1.5/...	YES	YES	YES	YES	YES	YES	YES
ECL 50-200/2/2.2A/...	YES	YES	YES	YES	YES	YES	YES
ECL 50-240/2/2.2/...	YES	YES	YES	YES	YES	YES	YES
ECL 50-250/2/3.0A/...	YES	YES	YES	YES	YES	YES	YES
ECL 50-290/2/3.0/...	YES	YES	YES	YES	YES	YES	YES
ECL 50-310/2/3.0A/...	YES	YES	YES	YES	YES	YES	YES
ECL 50-360/2/4.0/...	YES	YES	YES	YES	YES	YES	YES
ECL 50-370/2/4.0A/...	YES	YES	YES	YES	YES	YES	YES
ECL 50-420/2/7.5/...	YES	YES	YES	YES	YES	YES	YES
ECL 50-430/2/5.5/...	YES	YES	YES	YES	YES	YES	YES
ECL 50-540/2/11.0/...	NO	NO	NO	NO	YES	YES	YES
ECL 50-550/2/11.0/...	NO	NO	NO	NO	YES	YES	YES
ECL 50-630/2/15.0/...	NO	NO	NO	NO	YES	NO	NO
ECL 50-700/2/11.0A/...	NO	NO	NO	NO	YES	NO	NO
ECL 50-780/2/15.0A/...	NO	NO	NO	NO	YES	NO	NO
ECL 50-910/2/15.0A/...	NO	NO	NO	NO	YES	NO	NO

ECL 2 poles DN65F

Type	FC Danfoss ...I-D-RBS	FC Danfoss ...I-D-ZS	FC Danfoss ...I-D-2xTT	FC Danfoss ...I-D-DTT	FC Hitachi ...L-H-ZS	FC Hitachi ...L-H-DTSR	FC Hitachi ...L-H-DTT
ECL 65-170/2/2.2/...	YES	YES	YES	YES	YES	YES	YES
ECL 65-210/2/3.0/...	YES	YES	YES	YES	YES	YES	YES
ECL 65-250/2/5.5/...	YES	YES	YES	YES	YES	YES	YES
ECL 65-260/2/4.0A/...	YES	YES	YES	YES	YES	YES	YES
ECL 65-340/2/5.5/...	YES	YES	YES	YES	YES	YES	YES
ECL 65-350/2/7.5/...	YES	YES	YES	YES	YES	YES	YES
ECL 65-370/2/7.5A/...	YES	YES	YES	YES	YES	YES	YES
ECL 65-410/2/7.5/...	YES	YES	YES	YES	YES	YES	YES
ECL 65-520/2/11.0A/...	NO	NO	NO	NO	YES	YES	YES
ECL 65-550/2/15.0/...	NO	NO	NO	NO	YES	YES	YES
ECL 65-810/2/18.5A/...	NO	NO	NO	NO	YES	NO	NO
ECL 65-910/2/22.0A/...	NO	NO	NO	NO	YES	NO	NO

ECL 2 poles DN80F

Type	FC Danfoss ...I-D-RBS	FC Danfoss ...I-D-ZS	FC Danfoss ...I-D-2xTT	FC Danfoss ...I-D-DTT	FC Hitachi ...L-H-ZS	FC Hitachi ...L-H-DTSR	FC Hitachi ...L-H-DTT
ECL 80-180/2/3.0/...	YES	YES	YES	YES	YES	YES	YES
ECL 80-210/2/4.0/...	YES	YES	YES	YES	YES	YES	YES
ECL 80-240/2/5.5/...	YES	YES	YES	YES	YES	YES	YES
ECL 80-250/2/7.5/...	YES	YES	YES	YES	YES	YES	YES
ECL 80-330/2/11.0/...	NO	NO	NO	NO	YES	YES	YES
ECL 80-400/2/15.0/...	NO	NO	NO	NO	YES	YES	YES
ECL 80-420/2/15.0A/...	NO	NO	NO	NO	YES	YES	YES
ECL 80-440/2/15.0A/...	NO	NO	NO	NO	YES	YES	YES
ECL 80-510/2/18.5A/...	NO	NO	NO	NO	YES	YES	YES
ECL 80-570/2/22.0A/...	NO	NO	NO	NO	YES	YES	YES
ECL 80-600/2/22.0/...	NO	NO	NO	NO	YES	YES	YES
ECL 80-650/2/22.0A/...	NO	NO	NO	NO	YES	NO	NO
ECL 80-780/2/30.0A/...	NO	NO	NO	NO	YES	NO	NO
ECL 80-850/2/37.0A/...	NO	NO	NO	NO	YES	NO	NO

ECL 2 poles DN100F

Type	FC Danfoss ...I-D-RBS	FC Danfoss ...I-D-ZS	FC Danfoss ...I-D-2xTT	FC Danfoss ...I-D-DTT	FC Hitachi ...L-H-ZS	FC Hitachi ...L-H-DTSR	FC Hitachi ...L-H-DTT
ECL 100-250/2/11.0A/...	NO	NO	NO	NO	**YES**	**YES**	**YES**
ECL 100-290/2/15.0A/...	NO	NO	NO	NO	**YES**	**YES**	**YES**
ECL 100-340/2/15.0A/...	NO	NO	NO	NO	**YES**	**YES**	**YES**
ECL 100-390/2/15.0A/...	NO	NO	NO	NO	**YES**	**YES**	**YES**
ECL 100-420/2/18,5A/...	NO	NO	NO	NO	**YES**	**YES**	**YES**
ECL 100-470/2/22.0A/...	NO	NO	NO	NO	**YES**	**YES**	**YES**
ECL 100-560/2/30.0A/...	NO	NO	NO	NO	**YES**	**YES**	**YES**
ECL 100-570/2/37.0A/...	NO	NO	NO	NO	**YES**	**YES**	**YES**
ECL 100-680/2/37.0A/...	NO	NO	NO	NO	**YES**	NO	NO

ECL 2 poles DN125F

Type	FC Danfoss ...I-D-RBS	FC Danfoss ...I-D-ZS	FC Danfoss ...I-D-2xTT	FC Danfoss ...I-D-DTT	FC Hitachi ...L-H-ZS	FC Hitachi ...L-H-DTSR	FC Hitachi ...L-H-DTT
ECL 125-470/2/30.0A/...	NO	NO	NO	NO	**YES**	**YES**	**YES**
ECL 125-570/2/37.0A/...	NO	NO	NO	NO	**YES**	**YES**	**YES**

ECL 4 poles

ECL 4 poles DN 40F

Type	FC Danfoss ...I-D-RBS	FC Danfoss ...I-D-ZS	FC Danfoss ...I-D-2xTT	FC Danfoss ...I-D-DTT	FC Hitachi ...L-H-ZS	FC Hitachi ...L-H-DTSR	FC Hitachi ...L-H-DTT
ECL 40-60/4/0.55/...	YES	YES	YES	YES	YES	YES	YES
ECL 40-90/4/0.55/...	YES	YES	YES	YES	YES	YES	YES
ECL 40-110/4/0.75/...	YES	YES	YES	YES	YES	YES	YES
ECL 40-130/4/0.75A/...	YES	YES	YES	YES	YES	YES	YES
ECL 40-140/4/1.1/...	YES	YES	YES	YES	YES	YES	YES
ECL 40-190/4/1.1A/...	YES	YES	YES	YES	YES	YES	YES
ECL 40-220/4/1.5A/...	YES	YES	YES	YES	YES	YES	YES

ECL 4 poles DN50F

Type	FC Danfoss ...I-D-RBS	FC Danfoss ...I-D-ZS	FC Danfoss ...I-D-2xTT	FC Danfoss ...I-D-DTT	FC Hitachi ...L-H-ZS	FC Hitachi ...L-H-DTSR	FC Hitachi ...L-H-DTT
ECL 50-40/4/0.25A/...	YES	YES	YES	YES	YES	YES	YES
ECL 50-50/4/0.55/...	YES	YES	YES	YES	YES	YES	YES
ECL 50-70/4/0.55/...	YES	YES	YES	YES	YES	YES	YES
ECL 50-80/4/1.1/...	YES	YES	YES	YES	YES	YES	YES
ECL 50-100/4/0.75/...	YES	YES	YES	YES	YES	YES	YES
ECL 50-110/4/0.75/...	YES	YES	YES	YES	YES	YES	YES
ECL 50-110/4/1.1/...	YES	YES	YES	YES	YES	YES	YES
ECL 50-120/4/0.75/...	YES	YES	YES	YES	YES	YES	YES
ECL 50-120/4/1.1/...	YES	YES	YES	YES	YES	YES	YES
ECL 50-140/4/0.75/...	YES	YES	YES	YES	YES	YES	YES
ECL 50-140/4/1.5/...	YES	YES	YES	YES	YES	YES	YES
ECL 50-180/4/1.5A/...	YES	YES	YES	YES	YES	YES	YES
ECL 50-220/4/2.2A/...	YES	YES	YES	YES	YES	YES	YES

ECL 4 poles DN 65F

Type	FC Danfoss ...I-D-RBS	FC Danfoss ...I-D-ZS	FC Danfoss ...I-D-2xTT	FC Danfoss ...I-D-DTT	FC Hitachi ...L-H-ZS	FC Hitachi ...L-H-DTSR	FC Hitachi ...L-H-DTT
ECL 65-50/4/0.55/...	YES	YES	YES	YES	YES	YES	YES
ECL 65-70/4/0.75/...	YES	YES	YES	YES	YES	YES	YES
ECL 65-80/4/0.75A/...	YES	YES	YES	YES	YES	YES	YES
ECL 65-90/4/0.75/...	YES	YES	YES	YES	YES	YES	YES
ECL 65-90/4/1.1/...	YES	YES	YES	YES	YES	YES	YES
ECL 65-120/4/1.5/...	YES	YES	YES	YES	YES	YES	YES
ECL 65-130/4/1.1A/...	YES	YES	YES	YES	YES	YES	YES
ECL 65-140/4/1.5A/...	YES	YES	YES	YES	YES	YES	YES
ECL 65-150/4/2,2/...	YES	YES	YES	YES	YES	YES	YES
ECL 65-180/4/2.2A/...	YES	YES	YES	YES	YES	YES	YES
ECL 65-220/4/3.0A/...	YES	YES	YES	YES	YES	YES	YES

ECL 4 poles DN80F

Type	FC Danfoss ...I-D-RBS	FC Danfoss ...I-D-ZS	FC Danfoss ...I-D-2xTT	FC Danfoss ...I-D-DTT	FC Hitachi ...L-H-ZS	FC Hitachi ...L-H-DTSR	FC Hitachi ...L-H-DTT
ECL 80-40/4/0.55/...	YES	YES	YES	YES	YES	YES	YES
ECL 80-40/4/0.75/...	YES	YES	YES	YES	YES	YES	YES
ECL 80-60/4/0.75/...	YES	YES	YES	YES	YES	YES	YES
ECL 80-60/4/1.1/...	YES	YES	YES	YES	YES	YES	YES
ECL 80-60/4/1.5/...	YES	YES	YES	YES	YES	YES	YES
ECL 80-80/4/1.5/...	YES	YES	YES	YES	YES	YES	YES
ECL 80-80/4/2.2/...	YES	YES	YES	YES	YES	YES	YES
ECL 80-90/4/2.2/...	YES	YES	YES	YES	YES	YES	YES
ECL 80-100/4/1.5/...	YES	YES	YES	YES	YES	YES	YES
ECL 80-100/4/2.2/...	YES	YES	YES	YES	YES	YES	YES
ECL 80-110/4/2.2/...	YES	YES	YES	YES	YES	YES	YES
ECL 80-120/4/2.2/...	YES	YES	YES	YES	YES	YES	YES
ECL 80-130/4/2.2A/...	YES	YES	YES	YES	YES	YES	YES
ECL 80-140/4/2.2/...	YES	YES	YES	YES	YES	YES	YES
ECL 80-140/4/3.0/...	YES	YES	YES	YES	YES	YES	YES
ECL 80-200/4/4.0A/...	YES	YES	YES	YES	YES	YES	YES
ECL 80-230/4/5.5A/...	YES	YES	YES	YES	YES	YES	YES

ECL 4 poles DN 100F

Type	FC Danfoss ...I-D-RBS	FC Danfoss ...I-D-ZS	FC Danfoss ...I-D-2xTT	FC Danfoss ...I-D-DTT	FC Hitachi ...L-H-ZS	FC Hitachi ...L-H-DTSR	FC Hitachi ...L-H-DTT
ECL 100-85/4/1.5A/...	YES	YES	YES	YES	YES	YES	YES
ECL 100-100/4/2.2A/...	YES	YES	YES	YES	YES	YES	YES
ECL 100-110/4/2.2/...	YES	YES	YES	YES	YES	YES	YES
ECL 100-125/4/3.0A/...	YES	YES	YES	YES	YES	YES	YES
ECL 100-130/4/2.2/...	YES	YES	YES	YES	YES	YES	YES
ECL 100-130/4/3.0/...	YES	YES	YES	YES	YES	YES	YES
ECL 100-140/4/3.0/...	YES	YES	YES	YES	YES	YES	YES
ECL 100-140/4/4.0/...	YES	YES	YES	YES	YES	YES	YES
ECL 100-190/4/5.5A/...	YES	YES	YES	YES	YES	YES	YES
ECL 100-220/4/7.5A/...	YES	YES	YES	YES	YES	YES	YES

ECL 4 poles DN125F

Type	FC Danfoss ...I-D-RBS	FC Danfoss ...I-D-ZS	FC Danfoss ...I-D-2xTT	FC Danfoss ...I-D-DTT	FC Hitachi ...L-H-ZS	FC Hitachi ...L-H-DTSR	FC Hitachi ...L-H-DTT
ECL 125-120/4/5.5A/...	YES	YES	YES	YES	YES	YES	YES
ECL 125-160/4/5.5A/...	YES	YES	YES	YES	YES	YES	YES
ECL 125-195/4/7.5A/...	YES	YES	YES	YES	YES	YES	YES
ECL 125-220/4/11.0A/...	NO	NO	NO	NO	YES	YES	YES

ECL 4 poles DN150F

Type	FC Danfoss ...I-D-RBS	FC Danfoss ...I-D-ZS	FC Danfoss ...I-D-2xTT	FC Danfoss ...I-D-DTT	FC Hitachi ...L-H-ZS	FC Hitachi ...L-H-DTSR	FC Hitachi ...L-H-DTT
ECL 150-150/4/7.5A/...	NO	YES	YES	YES	YES	YES	YES
ECL 150-170/4/11.0A/...	NO	NO	NO	NO	YES	YES	YES
ECL 150-190/4/11.0A/...	NO	NO	NO	NO	YES	YES	YES
ECL 150-210/4/15.0A/...	NO	NO	NO	NO	YES	YES	YES

ECLD 2 poles

ECLD 2 poles DN 40F

Type	2x FC Danfoss ...I-D-RBS	2x FC Danfoss ...I-D-ZS	2x FC Danfoss ...I-D-2xTT	2x FC Danfoss ...I-D-2xDTT	2x FC Hitachi ...L-H-ZS	2x FC Hitachi ...L-H-2xDTSR	2x FC Hitachi ...L-H-2xDTT
ECLD 40-140/2/0.75A/...	YES	YES	YES	YES	YES	YES	YES
ECLD 40-170/2/0.75A/...	YES	YES	YES	YES	YES	YES	YES
ECLD 40-220/2/1.1A/...	YES	YES	YES	YES	YES	YES	YES
ECLD 40-250/2/1.5A/...	YES	YES	YES	YES	YES	YES	YES

ECLD 2 poles DN50F

Type	2x FC Danfoss ...I-D-RBS	2x FC Danfoss ...I-D-ZS	2x FC Danfoss ...I-D-2xTT	2x FC Danfoss ...I-D-2xDTT	2x FC Hitachi ...L-H-ZS	2x FC Hitachi ...L-H-2xDTSR	2x FC Hitachi ...L-H-2xDTT
ECLD 50-170/2/1.5A/...	YES	YES	YES	YES	YES	YES	YES
ECLD 50-200/2/2.2A/...	YES	YES	YES	YES	YES	YES	YES
ECLD 50-250/2/3.0A/...	YES	YES	YES	YES	YES	YES	YES
ECLD 50-310/2/3.0/A/...	YES	YES	YES	YES	YES	YES	YES
ECLD 50-370/2/4.0A/...	YES	YES	YES	YES	YES	YES	YES

ECLD 2 poles DN65F

Type	2x FC Danfoss ...I-D-RBS	2x FC Danfoss ...I-D-ZS	2x FC Danfoss ...I-D-2xTT	2x FC Danfoss ...I-D-2xDTT	2x FC Hitachi ...L-H-ZS	2x FC Hitachi ...L-H-2xDTSR	2x FC Hitachi ...L-H-2xDTT
ECLD 65-240/2/3.0A/...	YES	YES	YES	YES	YES	YES	YES
ECLD 65-270/2/4.0A/...	YES	YES	YES	YES	YES	YES	YES
ECLD 65-330/2/5.5A/...	YES	YES	YES	YES	YES	YES	YES
ECLD 65-370/2/7.5A/...	YES	YES	YES	YES	YES	YES	YES

ECLD 2 poles DN80F

Type	2x FC Danfoss ...I-D-RBS	2x FC Danfoss ...I-D-ZS	2x FC Danfoss ...I-D-2xTT	2x FC Danfoss ...I-D-2xDTT	2x FC Hitachi ...L-H-ZS	2x FC Hitachi ...L-H-2xDTSR	2x FC Hitachi ...L-H-2xDTT
ECLD 80-260/2/7.5A/...	YES	YES	YES	YES	YES	YES	YES
ECLD 80-310/2/11.0A/...	NO	NO	NO	NO	YES	YES	YES
ECLD 80-370/2/15.0A/...	NO	NO	NO	NO	YES	YES	YES
ECLD 80-420/2/15.0A/...	NO	NO	NO	NO	YES	YES	YES

ECLD 2 poles DN100F

Type	2x FC Danfoss ...I-D-RBS	2x FC Danfoss ...I-D-ZS	2x FC Danfoss ...I-D-2xTT	2x FC Danfoss ...I-D-2xDTT	2x FC Hitachi ...L-H-ZS	2x FC Hitachi ...L-H-2xDTSR	2x FC Hitachi ...L-H-2xDTT
ECLD 100-255/2/11.0A/...	NO	NO	NO	NO	YES	YES	YES
ECLD 100-285/2/15.0A/...	NO	NO	NO	NO	YES	YES	YES
ECLD 100-290/2/15.0A/...	NO	NO	NO	NO	YES	YES	YES
ECLD 100-315/2/15.0A/...	NO	NO	NO	NO	YES	YES	YES
ECLD 100-340/2/15.0A/...	NO	NO	NO	NO	YES	YES	YES
ECLD 100-390/2/15.0A/...	NO	NO	NO	NO	YES	YES	YES

ECLD 4 poles

ECLD 4 poles DN 40F

Type	2x FC Danfoss ...I-D-RBS	2x FC Danfoss ...I-D-ZS	2x FC Danfoss ...I-D-2xTT	2x FC Danfoss ...I-D-2xDTT	2x FC Hitachi ...L-H-ZS	2x FC Hitachi ...L-H-2xDTSR	2x FC Hitachi ...L-H-2xDTT
ECLD 40-40/4/0.25A/...	YES	YES	YES	YES	YES	YES	YES
ECLD 40-50/4/0.25A/...	YES	YES	YES	YES	YES	YES	YES
ECLD 40-65/4/0.25A/...	YES	YES	YES	YES	YES	YES	YES

ECLD 4 poles DN50F

Type	2x FC Danfoss ...I-D-RBS	2x FC Danfoss ...I-D-ZS	2x FC Danfoss ...I-D-2xTT	2x FC Danfoss ...I-D-2xDTT	2x FC Hitachi ...L-H-ZS	2x FC Hitachi ...L-H-2xDTSR	2x FC Hitachi ...L-H-2xDTT
ECLD 50-50/4/0.25A/...	YES	YES	YES	YES	YES	YES	YES
ECLD 50-65/4/0.37A/...	YES	YES	YES	YES	YES	YES	YES
ECLD 50-90/4/0.55A/...	YES	YES	YES	YES	YES	YES	YES

ECLD 4 poles DN65F

Type	2x FC Danfoss ...I-D-RBS	2x FC Danfoss ...I-D-ZS	2x FC Danfoss ...I-D-2xTT	2x FC Danfoss ...I-D-2xDTT	2x FC Hitachi ...L-H-ZS	2x FC Hitachi ...L-H-2xDTSR	2x FC Hitachi ...L-H-2xDTT
ECLD 65-70/4/0.75A/...	YES	YES	YES	YES	YES	YES	YES
ECLD 65-80/4/0.75A/...	YES	YES	YES	YES	YES	YES	YES
ECLD 65-90/4/1.1A/...	YES	YES	YES	YES	YES	YES	YES

ECLD 4 poles DN80F

Type	2x FC Danfoss ...I-D-RBS	2x FC Danfoss ...I-D-ZS	2x FC Danfoss ...I-D-2xTT	2x FC Danfoss ...I-D-2xDTT	2x FC Hitachi ...L-H-ZS	2x FC Hitachi ...L-H-2xDTSR	2x FC Hitachi ...L-H-2xDTT
ECLD 80-65/4/0.75A/...	YES	YES	YES	YES	YES	YES	YES
ECLD 80-75/4/1.1A/...	YES	YES	YES	YES	YES	YES	YES
ECLD 80-85/4/1.1A/...	YES	YES	YES	YES	YES	YES	YES
ECLD 80-105/4/1.5A/...	YES	YES	YES	YES	YES	YES	YES

ECLD 4 poles DN100F

Type	2x FC Danfoss ...I-D-RBS	2x FC Danfoss ...I-D-ZS	2x FC Danfoss ...I-D-2xTT	2x FC Danfoss ...I-D-2xDTT	2x FC Hitachi ...L-H-ZS	2x FC Hitachi ...L-H-2xDTSR	2x FC Hitachi ...L-H-2xDTT
ECLD 100-85/4/1.5A/...	YES	YES	YES	YES	YES	YES	YES
ECLD 100-105/4/2.2A/...	YES	YES	YES	YES	YES	YES	YES
ECLD 100-125/4/3.0A/...	YES	YES	YES	YES	YES	YES	YES
ECLD 100-150/4/4.0A/...	YES	YES	YES	YES	YES	YES	YES

CV, PV

CV/PV 32 - 4 / 60

- Impeller size
- Number of poles
- DN
- Type: CV - Casing Cast iron
  PV - Casing Bronze

Construction

Close-coupled, single-impeller, centrifugal pums with standard electric motor and electric motor with extended shaft. Pump casing with suction and delivery connections with the same diameter and on the same axis (in-line).

Motor

2 poles n ≈ 2900 rpm; 50Hz
4 poles n ≈ 1450 rpm; 50Hz

Three phase;
230V/400V

Technical specification of the motor	
Rated power	0,125kW - 0,25kW
Efficiency class	IE 3
Degree of protection	IP 55
Insulation class	F
MEI	MEI ≥ 0,40
ErP	ErP Standalone product

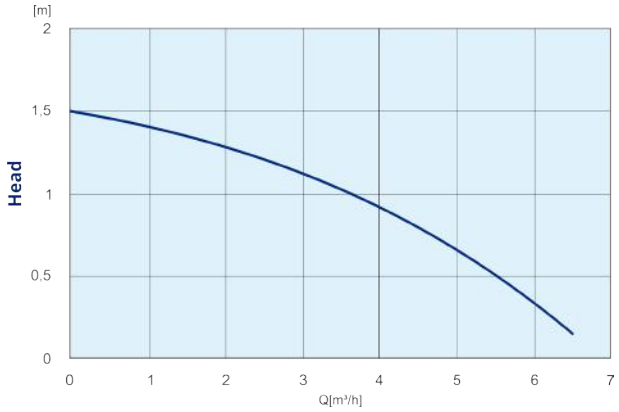
Technical data

TECHNICAL FEATURES	CV/PV
CONNECTIONS (DN)	32
CONNECTION TYPE	FLANGE
MAX OPERATING PRESSURE (PN)	10
AMBIENT TEMPERATURE	-10°C TO +40°C
MEDIA TEMPERATURE	-10°C TO +110°C
TWIN PUMP	NO
APPLICATIONS	**CV/PV**
HEATING	YES
COOLING	YES
SANITARY WATER	CV-NO; PV-YES
CLIMATE APPLIANCES	YES
INDUSTRY	YES
PROCESS TECHNIQUE	YES
CONDENSATION	NO
SALT WATER	NO
MATERIALS	**CV/PV**
HYDRAULIC CASING	CAST IRON/ BRONZE
IMPELLER	NORYL
MECHANICAL SEAL STANDARD	AQEG

Peformance range

CV/PV 2 poles ≈ 2900 rpm

CV/PV 4 poles ≈ 1450 rpm



CV 2 and 4 poles - Q/H performance

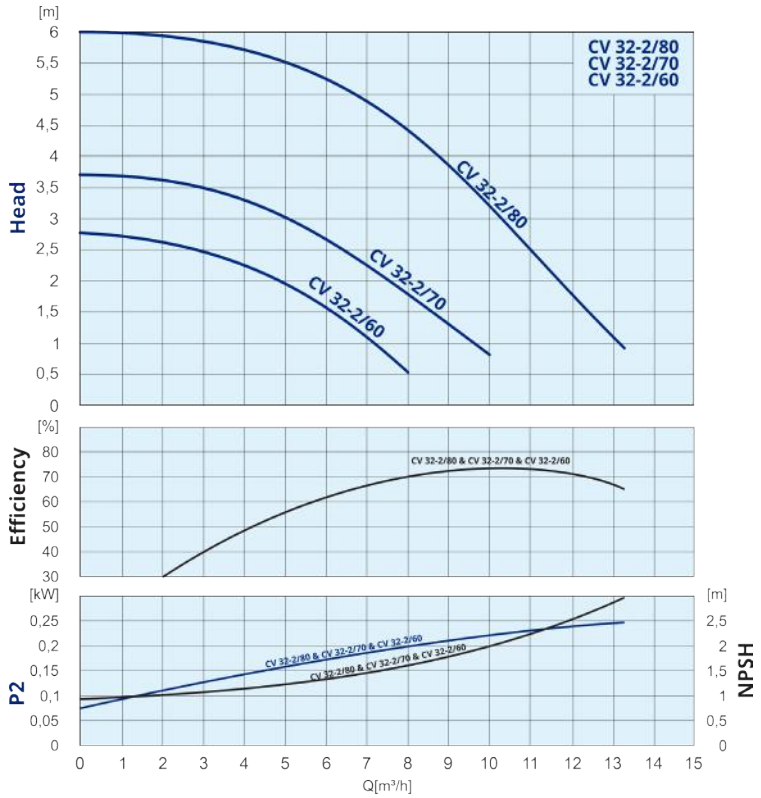
CV 2 poles

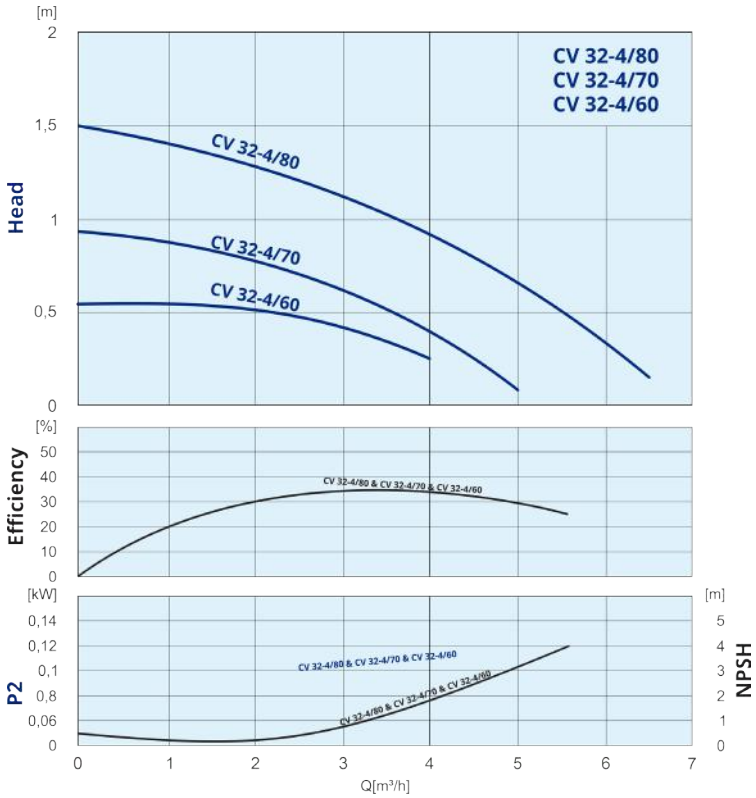
Code	Type	P [kW]	I [A]		Q [m³/h]													
					2	3	4	5	6	7	8	9	10	11	12	13	14	15
979521529	CV 32-2/60	0,25	0,64	H [m]	2,6	2,5	2,3	1,9	1,5	1,1	0,5							
979521528	CV 32-2/70	0,25	0,64		3,6	3,5	3,3	3	2,7	2,3	1,8	1,4	0,8					
979521527	CV 32-2/80	0,25	0,64		5,9	5,8	5,7	5,5	5,2	4,9	4,5	3,8	3,2	2,5	1,7	1,1		

CV 4 poles

Code	Type	P [kW]	I [A]		Q [m³/h]													
					0	1	2	3	4	5	6	7	8	9	10	11	12	13
979521532	CV 32-4/60	0,12	0,41	H [m]	0,6	0,6	0,5	0,4	0,3									
979521531	CV 32-4/70	0,12	0,41		0,9	0,8	0,8	0,7	0,4	0,1								
979521530	CV 32-4/80	0,12	0,41		1,5	1,4	1,3	1,2	0,9	0,7	0,3							

CV 2 and 4 poles - Performance curves





PV 2 and 4 poles - Q/H performance

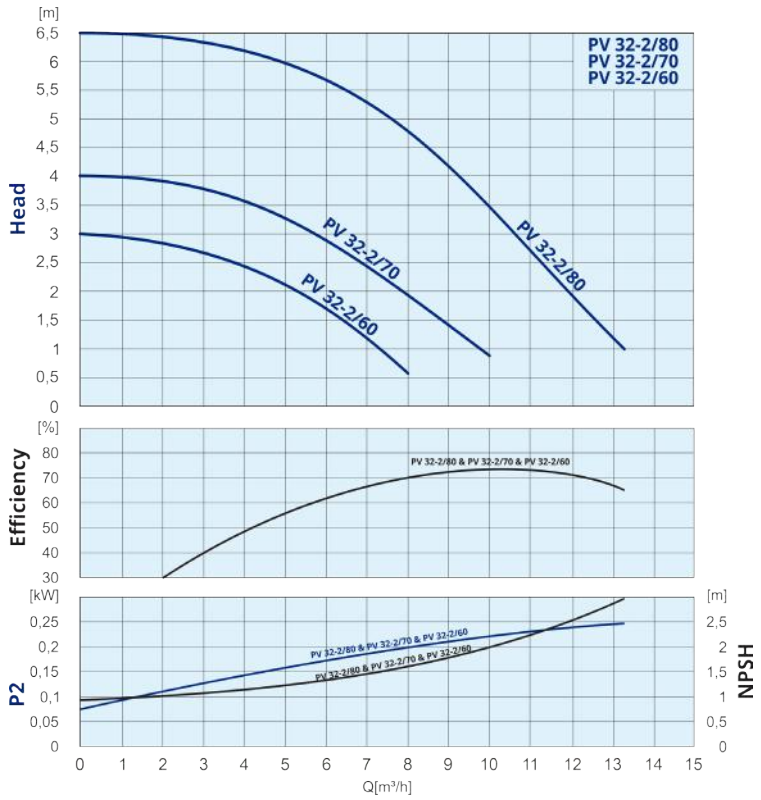
PV 2 poles

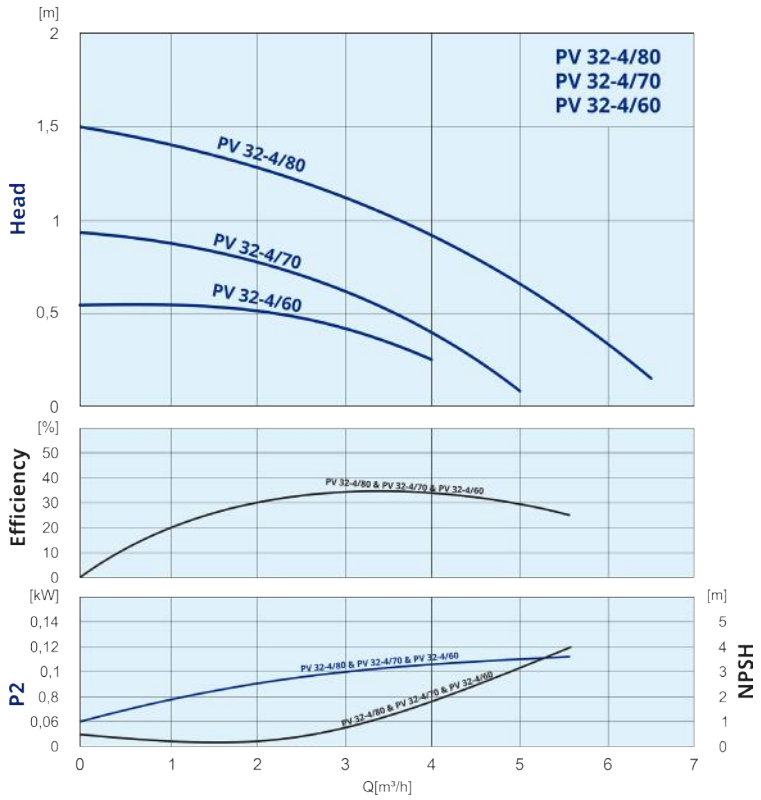
Code	Type	P [kW]	I [A]		Q [m³/h]													
					2	3	4	5	6	7	8	9	10	11	12	13	14	15
979521523	PV 32-2/60	0,25	0,64	H [m]	2,6	2,5	2,3	1,9	1,5	1,1	0,5							
979521522	PV 32-2/70	0,25	0,64		3,6	3,5	3,3	3	2,7	2,3	1,8	1,4	0,8					
979521521	PV 32-2/80	0,25	0,64		5,9	5,8	5,7	5,5	5,2	4,9	4,5	3,8	3,2	2,5	1,7	1,1		

PV 4 poles

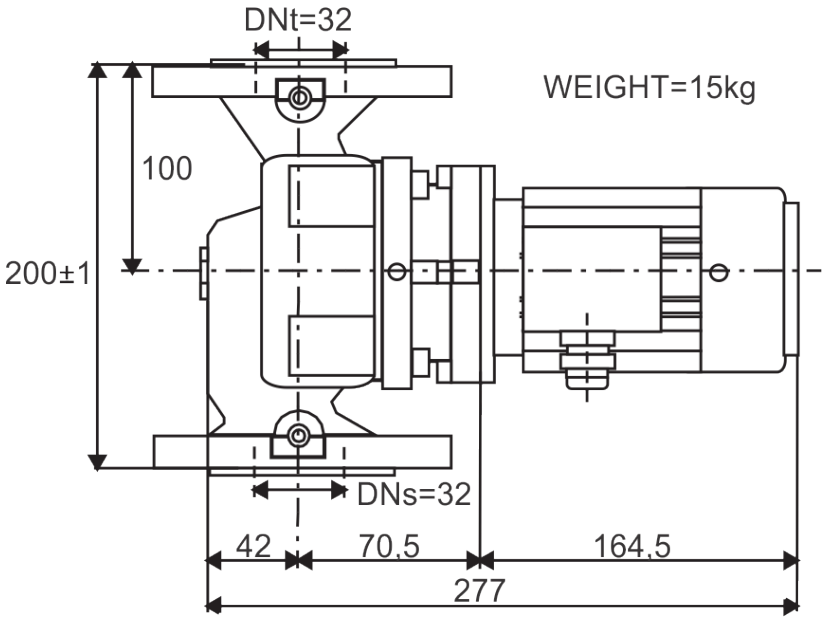
Code	Type	P [kW]	I [A]		Q [m³/h]													
					0	1	2	3	4	5	6	7	8	9	10	11	12	13
979521526	PV 32-4/60	0,12	0,41	H [m]	0,6	0,6	0,5	0,4	0,3									
979521525	PV 32-4/70	0,12	0,41		0,9	0,8	0,8	0,7	0,4	0,1								
979521524	PV 32-4/80	0,12	0,41		1,5	1,4	1,3	1,2	0,9	0,7	0,3							

CV 2 and 4 poles - Performance curves

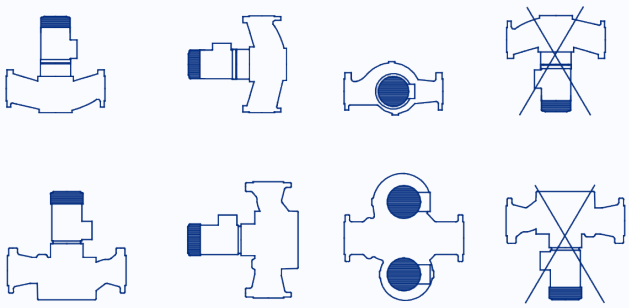




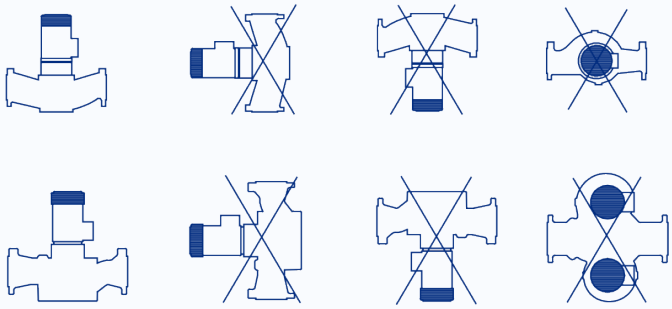
CV/PV 2 and 4 poles - Dimensions



Permited mounting positions for (E)CL(D), CV & PV pumps



Installation of motor sizes up to 7,5 kW



Installation of motor sizes from 11,0 kW

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