



Pump • Fire Fighting Units • Booster Set

# TH CDLF

## STAINLESS BOOSTERS

TH CDLF Rev.05.03.2024



### General Information

High pressure, quiet running, compact and low power consumption.

All surfaces that contact with the liquid are stainless steel, In-line (straight pipe attachable) type pumps.

CDLF pumps are suitable for pumping non-abrasive, clean or slightly contaminated, low-viscosity liquids without solid & fibrous particles.

Bearing is provided by tungsten carbide sliding bearings.

Vertical structure saves space.

### Technical Data

Capacity \_\_\_\_\_ up to 110 m<sup>3</sup>/h

Head \_\_\_\_\_ up to 160 m

Design Temperature \_\_\_\_\_ -10 °C to 120 °C

Casing Pressure \_\_\_\_\_ 10 - 16 - 25 barv

### Design Features

•TH CDLF booster pumps are manufactured as vertical pump.

•The booster pumps are produced as single, double and triple pumps as a standard according to the desired flow rate. Upon request, up to 6 pumps can be set.

•For Single-pump booster pumps have a water level float (electric floater).

•Phase control system (PCS) is available in single pump, three-phase motorized booster pumps.

•Sequencing, phase control and liquid level control are standard features for multiple pumped booster pumps.

•Booster pumps can operate in two different modes; automatically and manually.

•Electrical materials used in the booster pump panels are selected from reliable and quality brands.

### Booster Designation

# TH -1 x CDLF 4 / 10

Booster Type \_\_\_\_\_

Number of Pumps \_\_\_\_\_

Pump Type \_\_\_\_\_

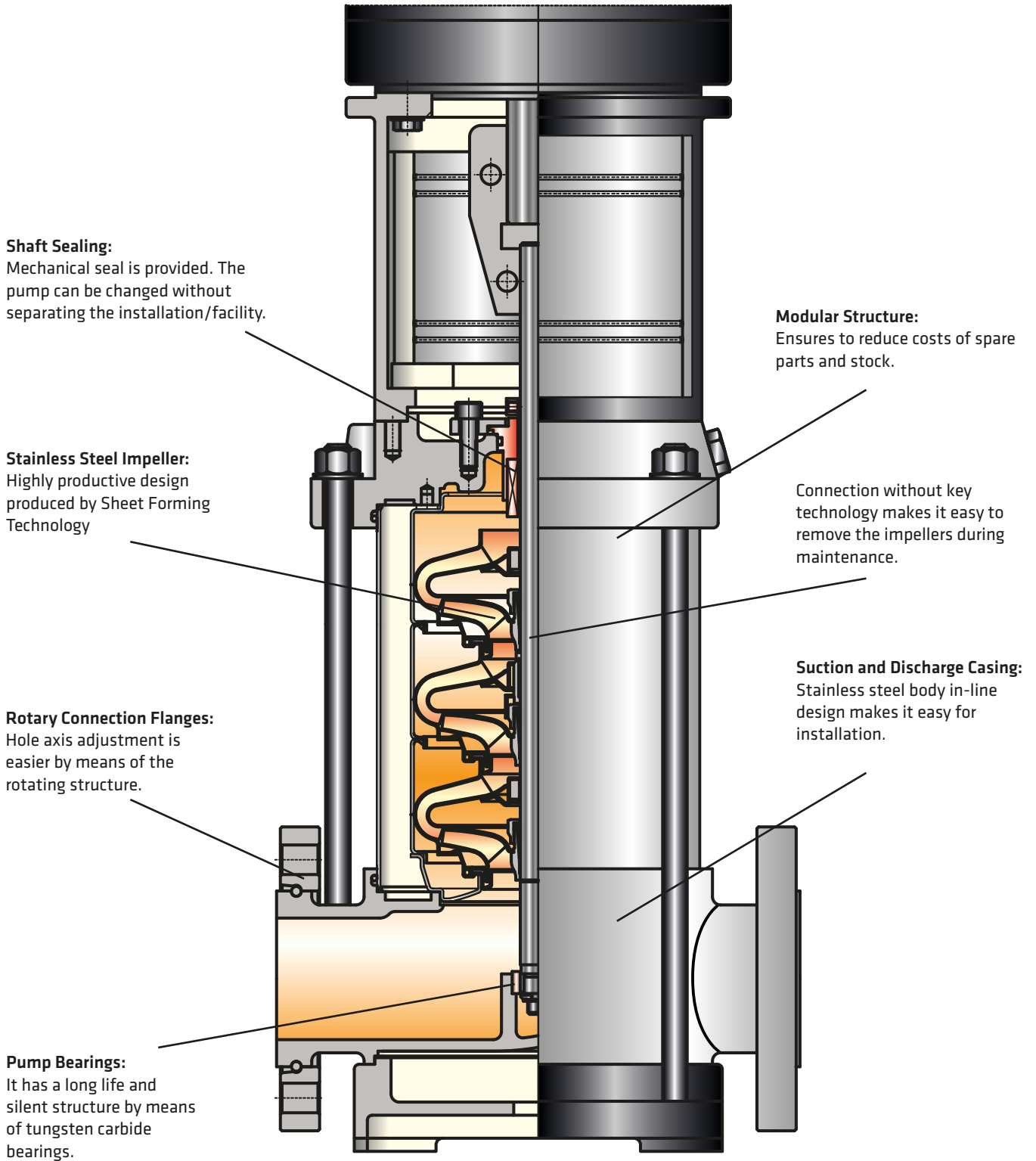
Model \_\_\_\_\_

Number of Stage \_\_\_\_\_

- Electric motors of high efficiency class conforming to IEC 60034-30 standard are used.
- Booster pumps can be manufactured with valve, check-valve, stainless steel base plate, depending on request.
- The booster pumps can be manufactured as a variable-speed frequency control for convenience.
- At 11 kW and above, the booster pump base plate is NPU iron construction.

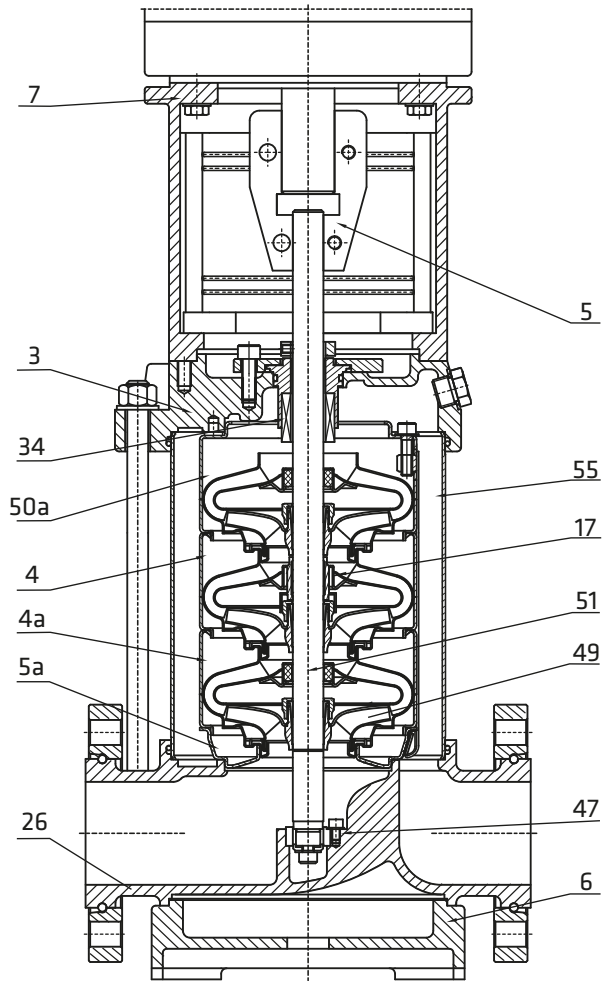
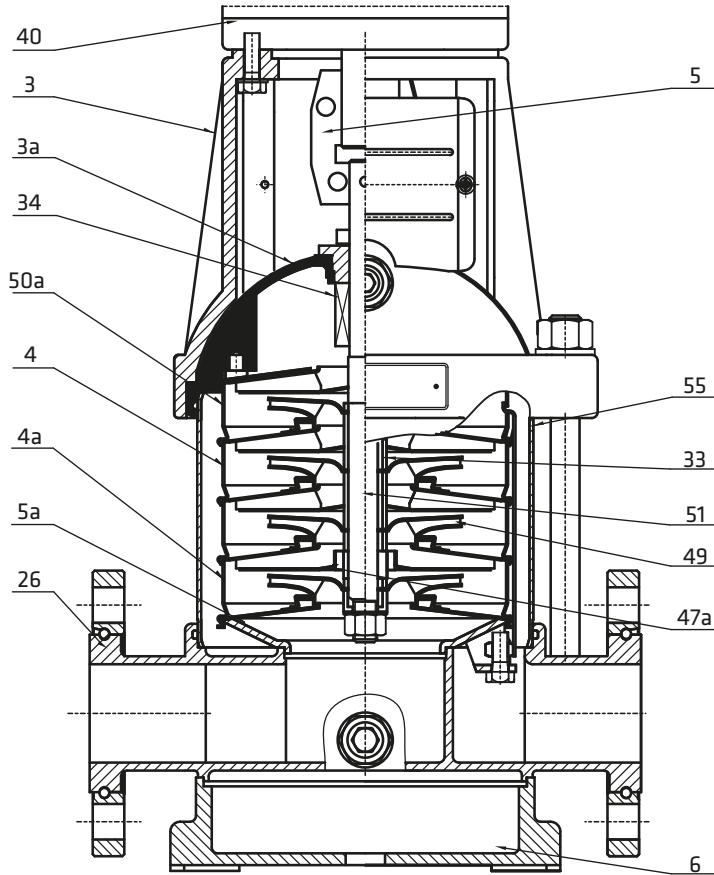
### Material Information

Part Name	Material	
	Standard	Optional
<b>Pump</b>		
Base Plate	GG 25	-
Stage Casing	AISI 304	-
Intermediate Stage	AISI 304	-
Impeller	AISI 304	-
Shaft	AISI 304	-
Tube	AISI 304	-
<b>Panel</b>	Pressure Switch Controlled	Frequency Controlled
<b>Collector</b>	AISI 304	AISI 316 L / Galvanized Steel
<b>Frame</b>	Steel	AISI 316 L
<b>Accessories</b>		
Valve	Brass	AISI 304
Check Valve	Brass	AISI 316



CDLF 4,8,12,16,20

CDLF 32,42,65,85



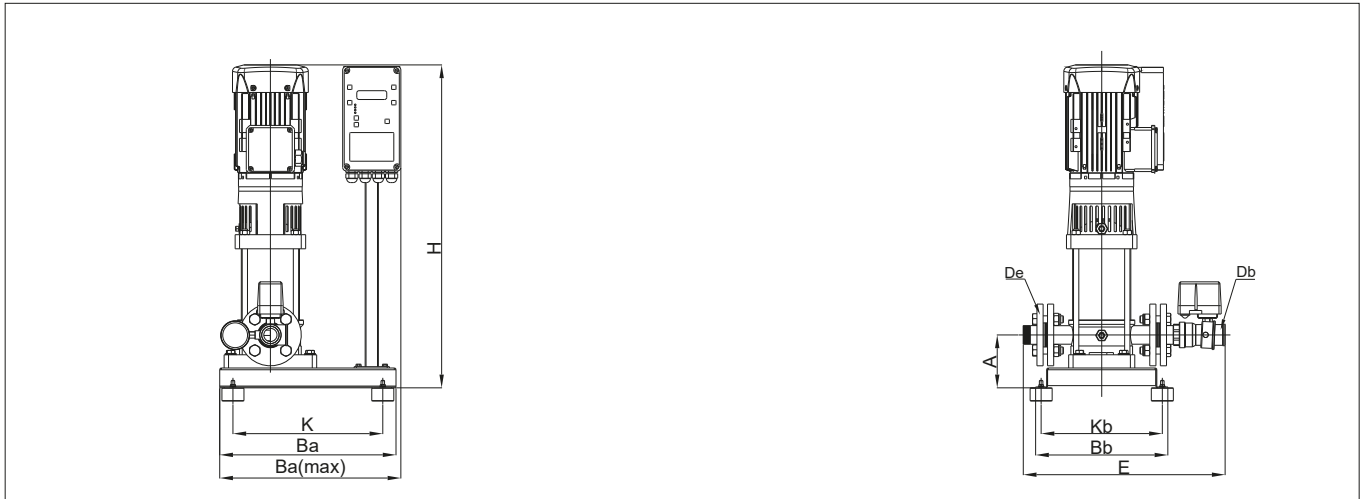
Part List

3	Upper Body	Cast Iron (GG 25)
3a	Liner	Stainless Steel (AISI 304)
4	Diffuser	Stainless Steel (AISI 304)
4a	Lower Diffuser	Stainless Steel (AISI 304)
5	Coupling	Carbon Steel
5a	Inducer	Stainless Steel (AISI 304)
6	Baseplate	Cast Iron (GG 25)
26	Suction and Discharge Casing	Stainless Steel (AISI 304)
33	Sleeve	Stainless Steel (AISI 304)
34	Mechanical Seal	-
40	Electric Motor	-
47a	Bearing	Tungsten carbide
49	Impeller	Stainless Steel (AISI 304)
50a	Upper Diffuser	Stainless Steel (AISI 304)
51	Pump Shaft	Stainless Steel (AISI 304)
55	Cover Plate	Stainless Steel (AISI 304)

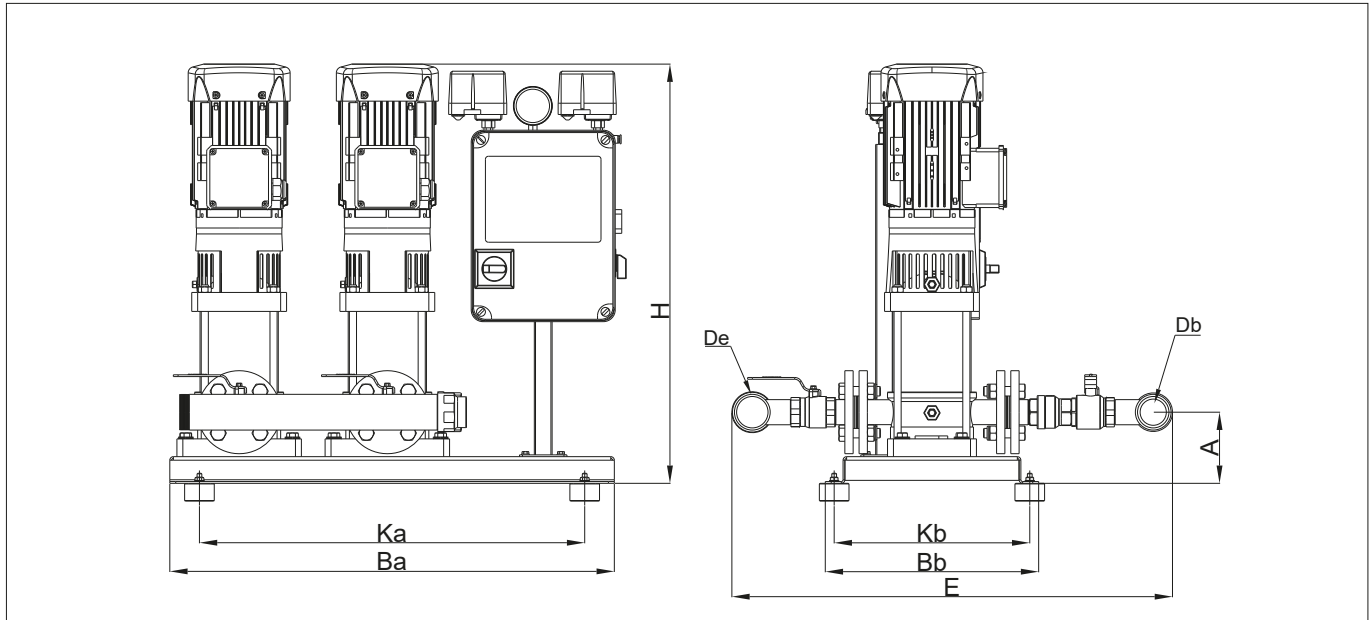
3	Upper Body	Stainless steel (AISI 304)
4	Diffuser	Stainless steel (AISI 304)
4a	Lower Diffuser	Stainless steel (AISI 304)
5	Coupling	Carbon Steel
5a	Inducer	Stainless steel (AISI 304)
6	Baseplate	Cast Iron (GG 25)
7	Motor Pedestal	Cast Iron (GG 25)
17	Bearing	Tungsten carbide
26	Suction and Discharge Casing	Stainless steel (AISI 304)
34	Mechanical Seal	-
47	Lower Bearing	Tungsten Carbide
49	Impeller	Stainless steel (AISI 304)
50a	Upper Diffuser	Stainless steel (AISI 304)
51	Pump shaft	Stainless steel (AISI 304)
55	Cover Plate	Stainless steel (AISI 304)

Booster set with one pump

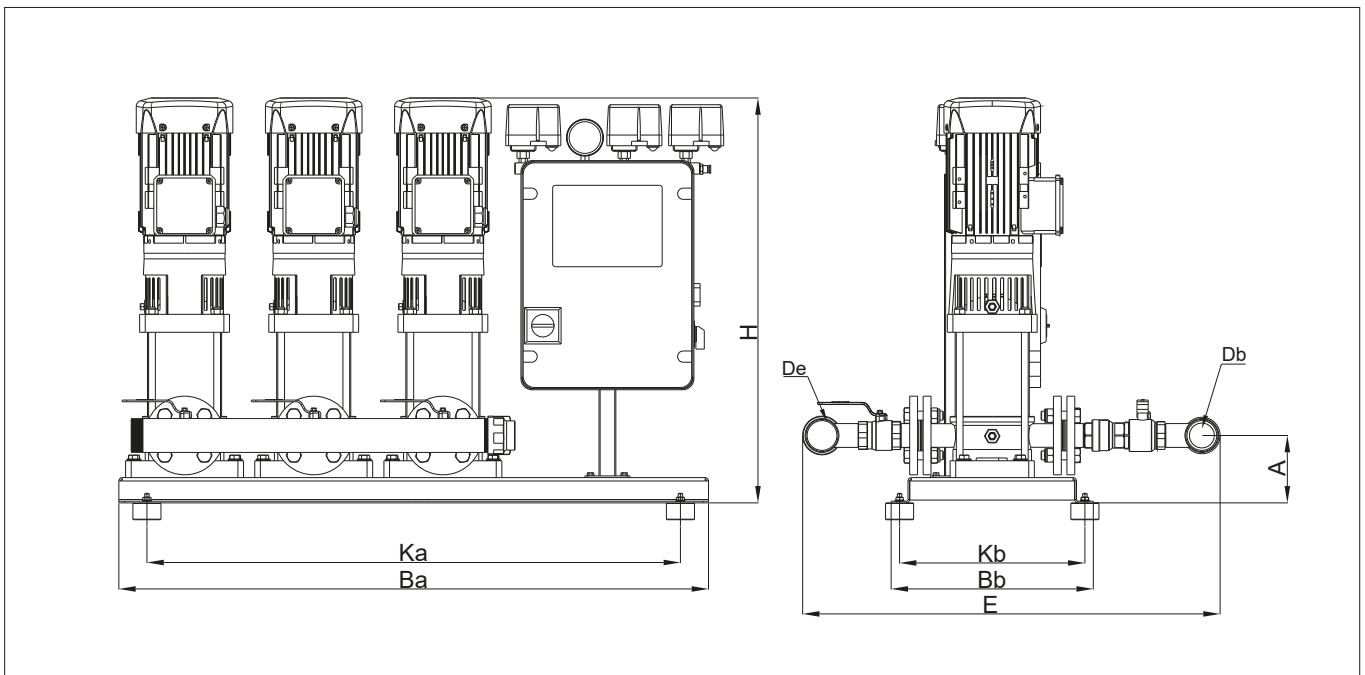
NPU Base Plate Design

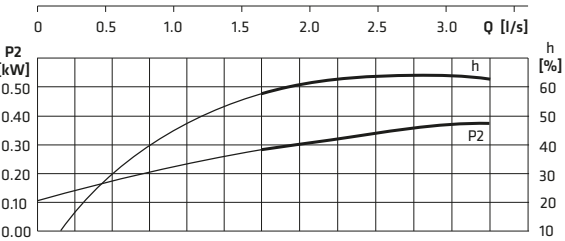
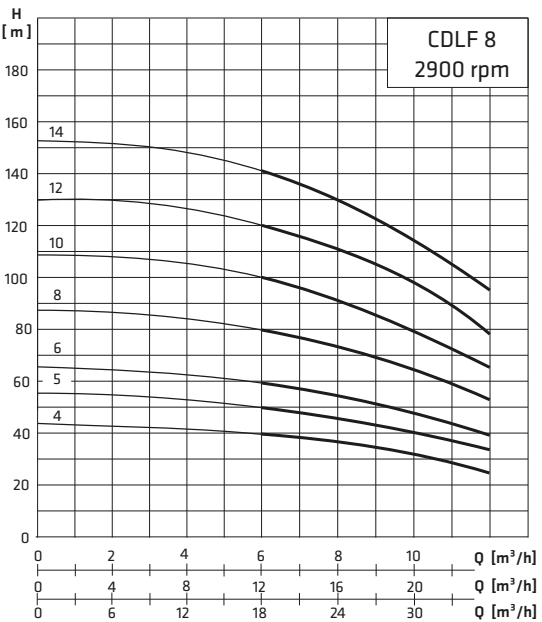
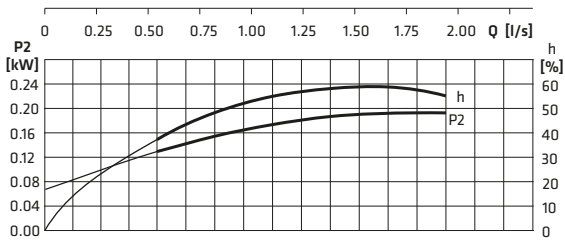
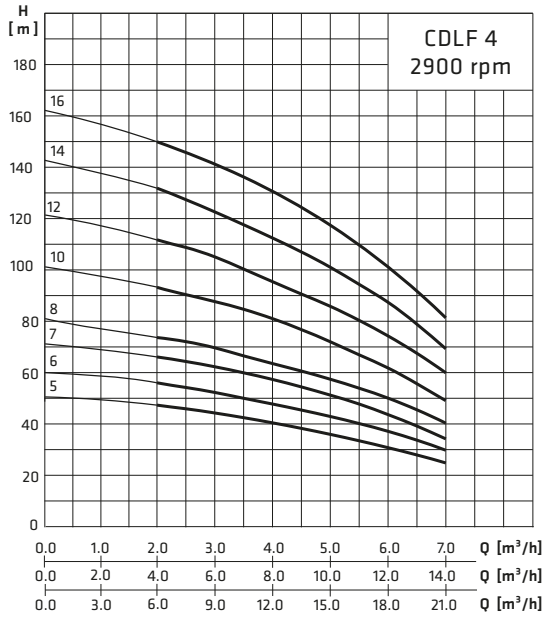


Booster set with two pumps



Booster set with three pumps





Pump Type	kW	De	Db	Ba	Bb	Ba (mx)	H	Ka	Kb	E	A	KG
TH-1xCDLF 4-5	1.1					660						39
TH-1xCDLF 4-6	1.1					685						39
TH-1xCDLF 4-7	1.5					765						45
TH-1xCDLF 4-8	1.5	1 1/4"	1 1/4"	400	300	415	795	340	275	430	120	45
TH-1xCDLF 4-10	2.2					835						49
TH-1xCDLF 4-12	2.2					900						50
TH-1xCDLF 4-14	3					990						58
TH-1xCDLF 4-16	3					1045						60

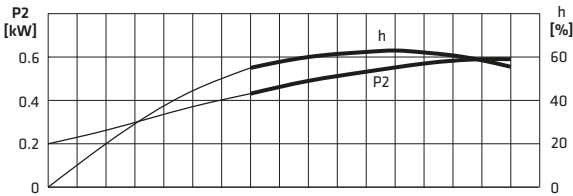
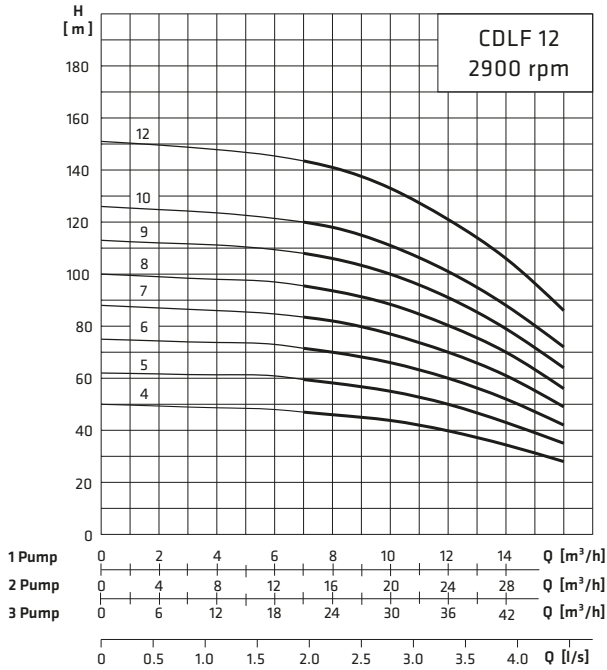
Pump Type	kW	De	Db	Ba	Bb	H	Ka	Kb	E	A	KG
TH-2xCDLF 4-5	1.1					660					115
TH-2xCDLF 4-6	1.1					685					115
TH-2xCDLF 4-7	1.5					765					127
TH-2xCDLF 4-8	1.5	2"	2"	750	360	795	650	330	750	120	127
TH-2xCDLF 4-10	2.2					835					135
TH-2xCDLF 4-12	2.2					900					137
TH-2xCDLF 4-14	3					990					153
TH-2xCDLF 4-16	3					1045					157

Pump Type	kW	De	Db	Ba	Bb	H	Ka	Kb	E	A	KG
TH-3xCDLF 4-5	1.1					660					161
TH-3xCDLF 4-6	1.1					685					161
TH-3xCDLF 4-7	1.5					765					179
TH-3xCDLF 4-8	1.5	2"	2"	1050	360	795	950	330	750	120	179
TH-3xCDLF 4-10	2.2					835					191
TH-3xCDLF 4-12	2.2					900					194
TH-3xCDLF 4-14	3					990					218
TH-3xCDLF 4-16	3					1045					224

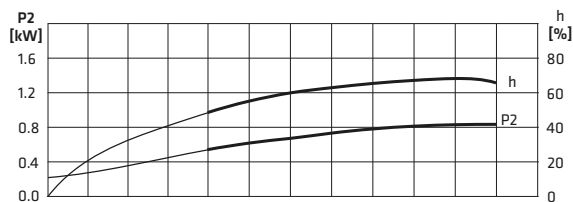
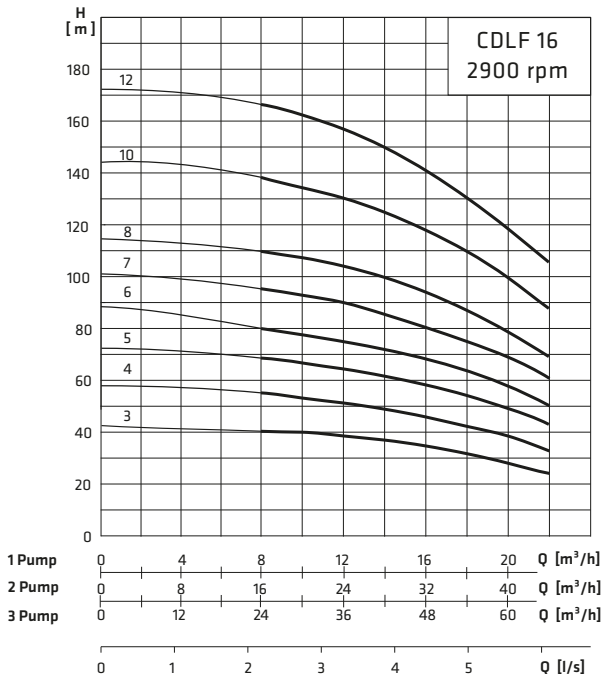
Pump Type	kW	De	Db	Ba	Bb	Ba (mx)	H	Ka	Kb	E	A	KG
TH-1xCDLF 8-4	1.5					755						54
TH-1xCDLF 8-5	2.2					785						58
TH-1xCDLF 8-6	2.2					815						59
TH-1xCDLF 8-8	3	1 1/2"	1 1/2"	400	300	415	907	240	410	510	130	67
TH-1xCDLF 8-10	4					987						78
TH-1xCDLF 8-12	4					1047						80
TH-1xCDLF 8-14	5.5					1222						95

Pump Type	kW	De	Db	Ba	Bb	H	Ka	Kb	E	A	KG
TH-2xCDLF 8-4	1.5					755					145
TH-2xCDLF 8-5	2.2					785					153
TH-2xCDLF 8-6	2.2					815					155
TH-2xCDLF 8-8	3	2"	2"	850	360	907	750	330	850	125	171
TH-2xCDLF 8-10	4					987					193
TH-2xCDLF 8-12	4					1047					197
TH-2xCDLF 8-14	5.5					1222					227

Pump Type	kW	De	Db	Ba	Bb	H	Ka	Kb	E	A	KG
TH-3xCDLF 8-4	1.5					755					145
TH-3xCDLF 8-5	2.2					785					153
TH-3xCDLF 8-6	2.2					815					155
TH-3xCDLF 8-8	3	2"	2"	850	360	907	750	330	850	125	171
TH-3xCDLF 8-10	4					987					193
TH-3xCDLF 8-12	4					1047					197
TH-3xCDLF 8-14	5.5					1222					227



Performance curves are given according to ISO9906:2012 Gr3B



Performance curves are given according to ISO9906:2012 Gr3B

Pump Type	kW	De	Db	Ba	Bb	Ba (mx)	H	Ka	Kb	E	A	KG
TH-1xCDLF 12-4	3						800					65
TH-1xCDLF 12-5	3						830					67
TH-1xCDLF 12-6	4						880					75
TH-1xCDLF 12-7	5.5	2"	2"	400	300	415	1025	340	275	540	135	87
TH-1xCDLF 12-8	5.5						1055					88
TH-1xCDLF 12-9	5.5						1085					90
TH-1xCDLF 12-10	7.5						1115					110
TH-1xCDLF 12-12	7.5						1175					114

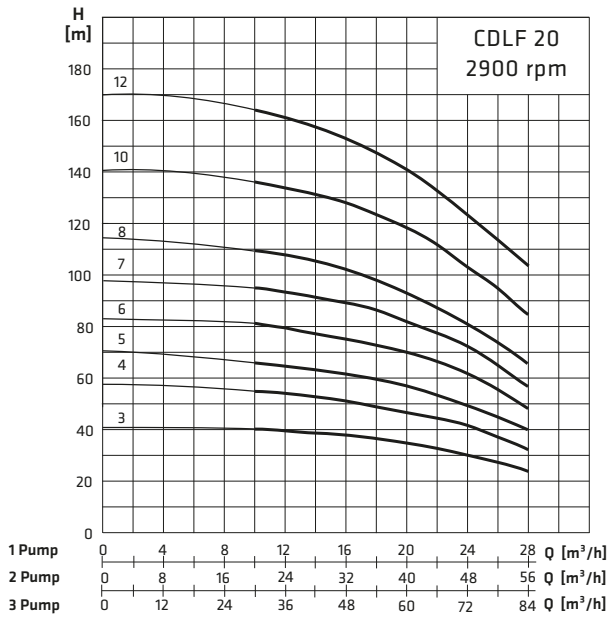
Pump Type	kW	De	Db	Ba	Bb	H	Ka	Kb	E	A	KG
TH-2xCDLF 12-4	3					800					167
TH-2xCDLF 12-5	3					830					171
TH-2xCDLF 12-6	4					880					187
TH-2xCDLF 12-7	5.5	2½"	2½"	900	360	1025	800	330	950	135	211
TH-2xCDLF 12-8	5.5					1055					213
TH-2xCDLF 12-9	5.5					1085					217
TH-2xCDLF 12-10	7.5					1115					246
TH-2xCDLF 12-12	7.5					1175					254

Pump Type	kW	De	Db	Ba	Bb	H	Ka	Kb	E	A	KG
TH-3xCDLF 12-4	3					800					237
TH-3xCDLF 12-5	3					830					243
TH-3xCDLF 12-6	4					880					267
TH-3xCDLF 12-7	5.5	3"	3"	1250	360	1025	1150	330	980	135	303
TH-3xCDLF 12-8	5.5					1055					306
TH-3xCDLF 12-9	5.5					1085					312
TH-3xCDLF 12-10	7.5					1115					419
TH-3xCDLF 12-12	7.5					1175					432

Pump Type	kW	De	Db	Ba	Bb	Ba (mx)	H	Ka	Kb	E	A	KG
TH-1xCDLF 16-3	3						815					64
TH-1xCDLF 16-4	4						880					73
TH-1xCDLF 16-5	5.5						1040					90
TH-1xCDLF 16-6	5.5	2"	2"	400	300	415	1085	340	275	540	135	91
TH-1xCDLF 16-7	5.5						1130					98
TH-1xCDLF 16-8	7.5						1175					100
TH-1xCDLF 16-10	7.5						1410					182
TH-1xCDLF 16-12	11						1500					185

Pump Type	kW	De	Db	Ba	Bb	H	Ka	Kb	E	A	KG
TH-2xCDLF 16-3	3					815					165
TH-2xCDLF 16-4	4					880					183
TH-2xCDLF 16-5	5.5					1040					217
TH-2xCDLF 16-6	5.5	2½"	2½"	850	360	1085	750	330	860	135	219
TH-2xCDLF 16-7	7.5					1130					233
TH-2xCDLF 16-8	7.5					1175					237
TH-2xCDLF 16-10	11			1450		1410	1350				396
TH-2xCDLF 16-12	11					1500					402

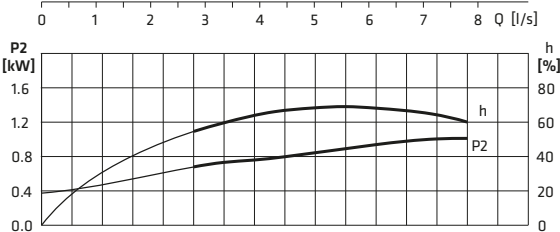
Pump Type	kW	De	Db	Ba	Bb	H	Ka	Kb	E	A	KG
TH-3xCDLF 16-3	3					815					234
TH-3xCDLF 16-4	4					880					261
TH-3xCDLF 16-5	5.5					1040					312
TH-3xCDLF 16-6	5.5	3"	3"	1250	360	1085	1150	330	870	135	315
TH-3xCDLF 16-7	7.5					1130					336
TH-3xCDLF 16-8	7.5					1175					342
TH-3xCDLF 16-10	11			1800		1410	1600				591
TH-3xCDLF 16-12	11					1500					599



Pump Type	kW	De	Db	Ba	Bb	Ba (mx)	H	Ka	Kb	E	A	KG
TH-1xCDLF 20-3	4						835					72
TH-1xCDLF 20-4	5.5						995					88
TH-1xCDLF 20-5	5.5						1040					90
TH-1xCDLF 20-6	7.5	2"	2"	400	300	415	1085	410	240	540	135	96
TH-1xCDLF 20-7	7.5						1130					98
TH-1xCDLF 20-8	11						1320					179
TH-1xCDLF 20-10	11						1410					183
TH-1xCDLF 20-12	15						1500					196

Pump Type	kW	De	Db	Ba	Bb	H	Ka	Kb	E	A	KG
TH-2xCDLF 20-3	4					835					181
TH-2xCDLF 20-4	5.5					995					213
TH-2xCDLF 20-5	5.5					1040					217
TH-2xCDLF 20-6	7.5	2½"	2½"	850	360	1085	750	330	920	135	229
TH-2xCDLF 20-7	7.5					1130					233
TH-2xCDLF 20-8	11					1320					413
TH-2xCDLF 20-10	11			1450		1410	1350				421
TH-2xCDLF 20-12	15					1500					452

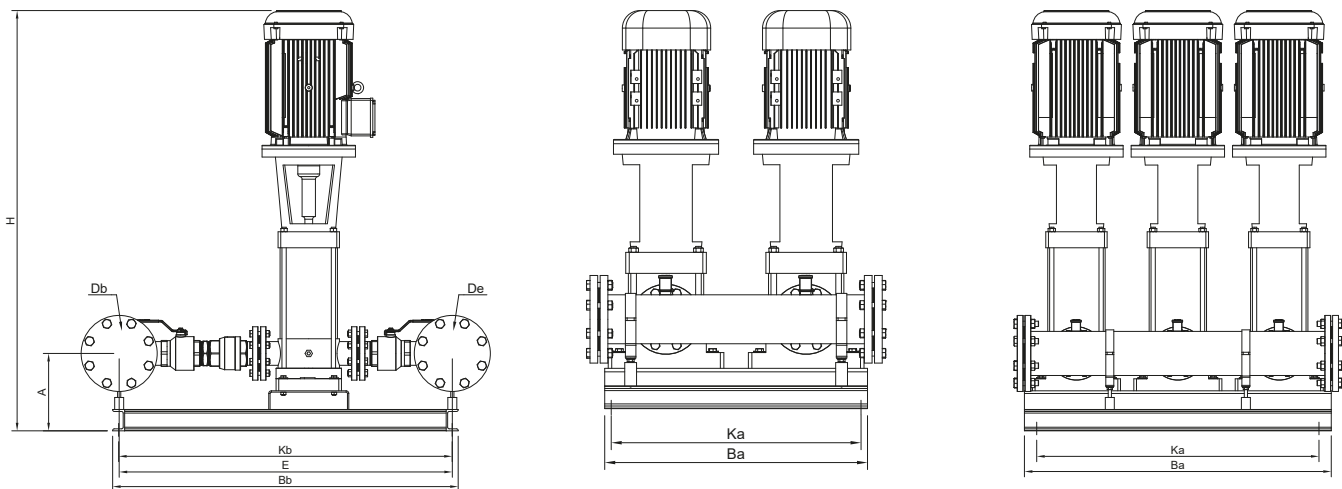
Pump Type	kW	De	Db	Ba	Bb	H	Ka	Kb	E	A	KG
TH-3xCDLF 20-3	4					835					306
TH-3xCDLF 20-4	5.5					995					354
TH-3xCDLF 20-5	5.5					1040					360
TH-3xCDLF 20-6	7.5	3"	3"	1250	360	1085	1150	330	935	135	378
TH-3xCDLF 20-7	7.5					1130					384
TH-3xCDLF 20-8	11					1320					611
TH-3xCDLF 20-10	11			1800		1410	1600				623
TH-3xCDLF 20-12	15					1500					667



Performance curves are given according to ISO9906:2012 Gr3B

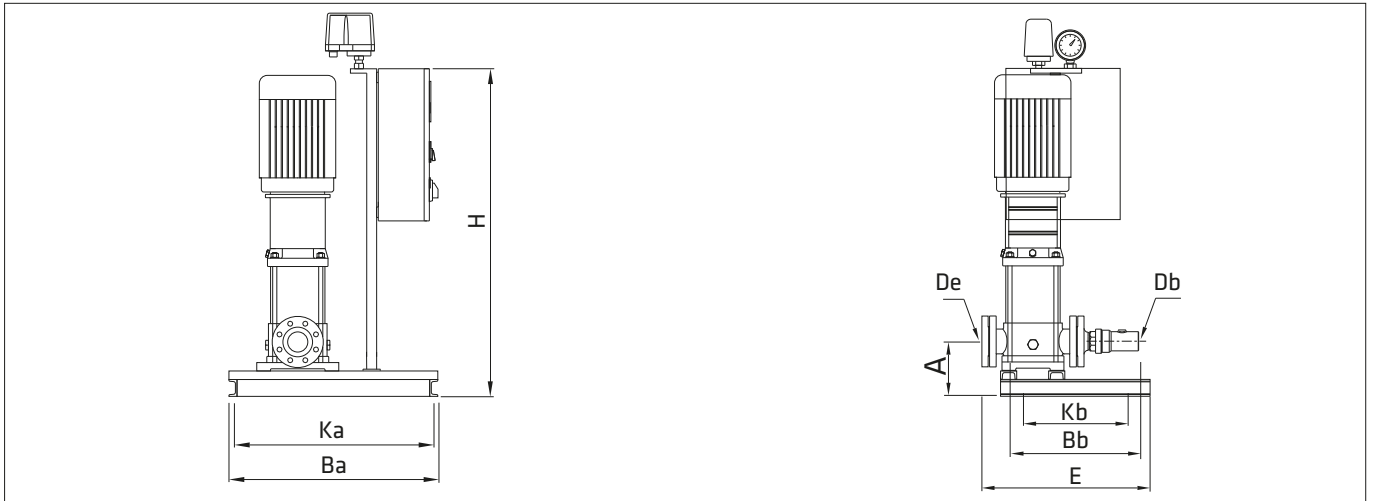
## Dimensions CLDF (32,42,65 ve 85)

The drawings which are given below illustrates the booster sets which are CDLF 32, 42, 65 and 85 series with 18.5 kW and above motor power. Control panel of those booster set are supplied separately from base plate.

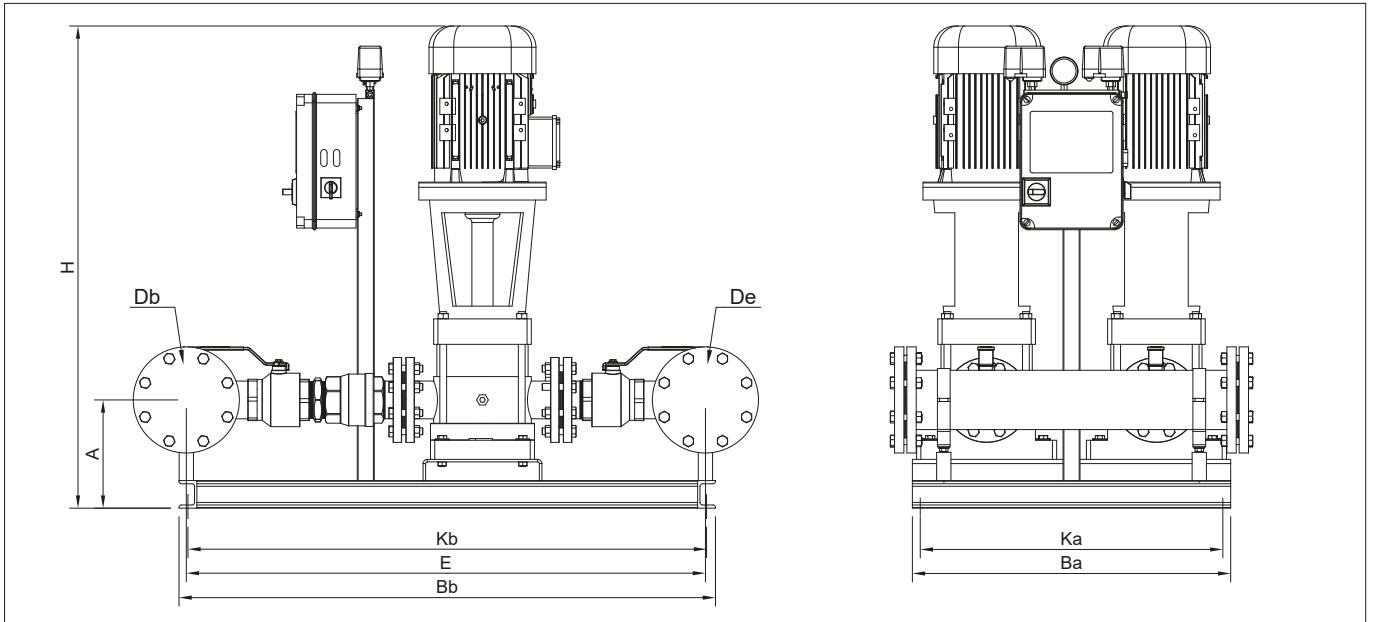


**Booster set with one pump**

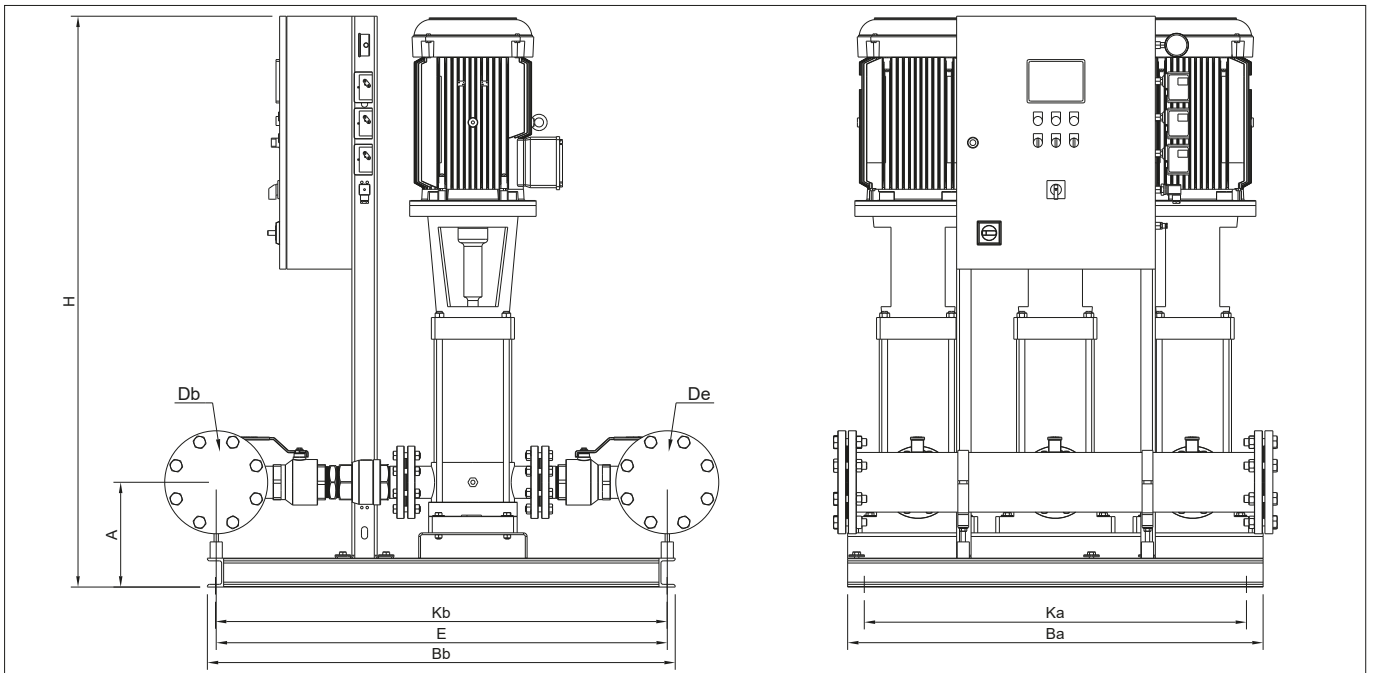
**NPU Baseplate Design**



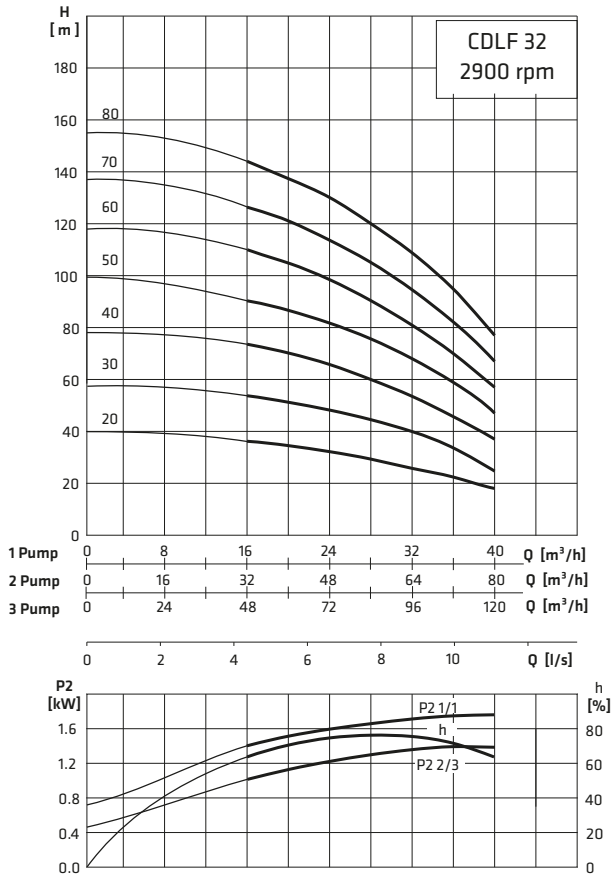
**Booster set with two pumps**



**Booster set with three pumps**



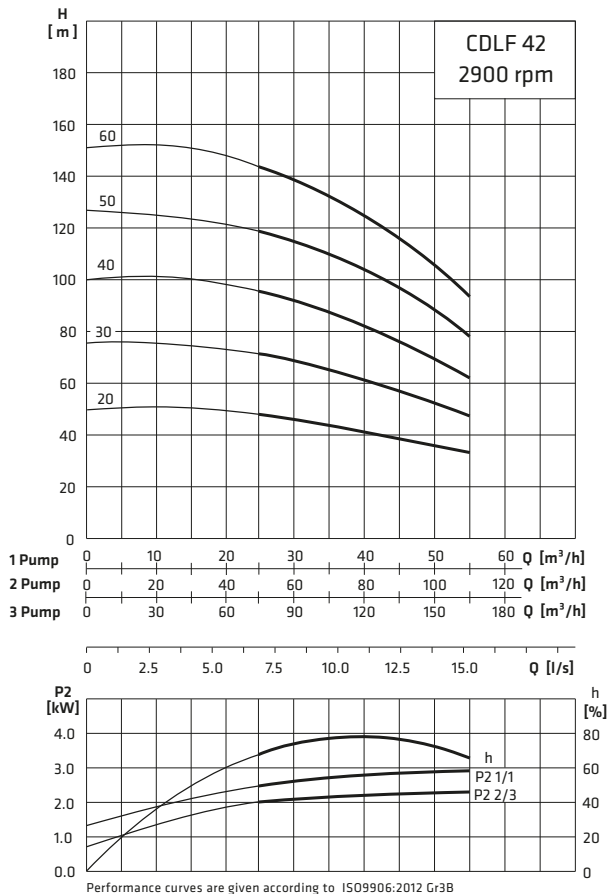




Pump Type	kW	De	Db	Ba	Bb	H	Ka	Kb	E	A	Tas.	KG
TH-1xCDLF 32-20	4					1000						116
TH-1xCDLF 32-30	5.5					1150						131
TH-1xCDLF 32-40	7.5					1200						140
TH-1xCDLF 32-50	11	2 1/2"	2 1/2"	570	610	1550	530	470	590	235	B	241
TH-1xCDLF 32-60	11					1600						245
TH-1xCDLF 32-70	15					1650						264
TH-1xCDLF 32-80	15					1750						268

Pump Type	kW	De	Db	Ba	Bb	H	Ka	Kb	E	A	Tas.	KG
TH-2xCDLF 32-20	4					1000						273
TH-2xCDLF 32-30	5.5					1150						303
TH-2xCDLF 32-40	7.5					1200						321
TH-2xCDLF 32-50	11	4"	4"	850	930	1550	810	790	890	235	B	482
TH-2xCDLF 32-60	11					1650						490
TH-2xCDLF 32-70	15					1700						518
TH-2xCDLF 32-80	15					1800						526

Pump Type	kW	De	Db	Ba	Bb	H	Ka	Kb	E	A	Tas.	KG
TH-3xCDLF 32-20	4					1000						413
TH-3xCDLF 32-30	5.5					1150						458
TH-3xCDLF 32-40	7.5					1250						485
TH-3xCDLF 32-50	11	5"	5"	1300	950	1550	1260	810	915	235	B	721
TH-3xCDLF 32-60	11					1650						733
TH-3xCDLF 32-70	15					1700						780
TH-3xCDLF 32-80	15					1800						792

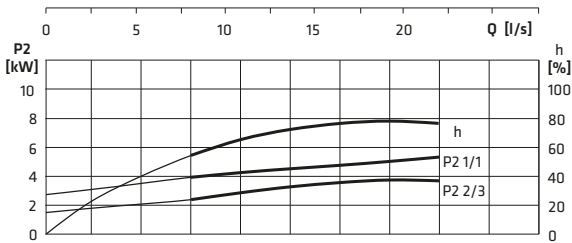
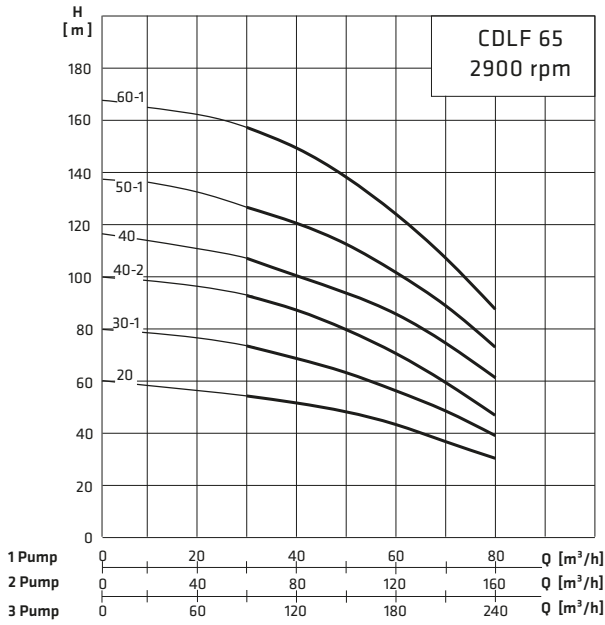


Pump Type	kW	De	Db	Ba	Bb	H	Ka	Kb	E	A	Tas.	KG
TH-1xCDLF 42-20	7.5					1250						149
TH-1xCDLF 42-30	11					1450						222
TH-1xCDLF 42-40	15	3"	3"	570	570	1550	530	430	550	285	B	236
TH-1xCDLF 42-50	18.5					1700						260
TH-1xCDLF 42-60	22					1800						300

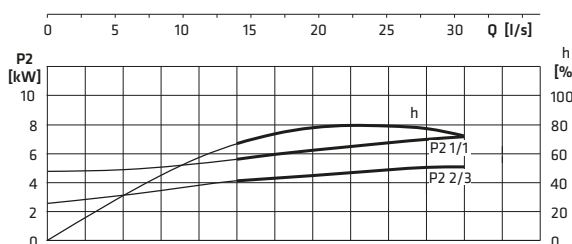
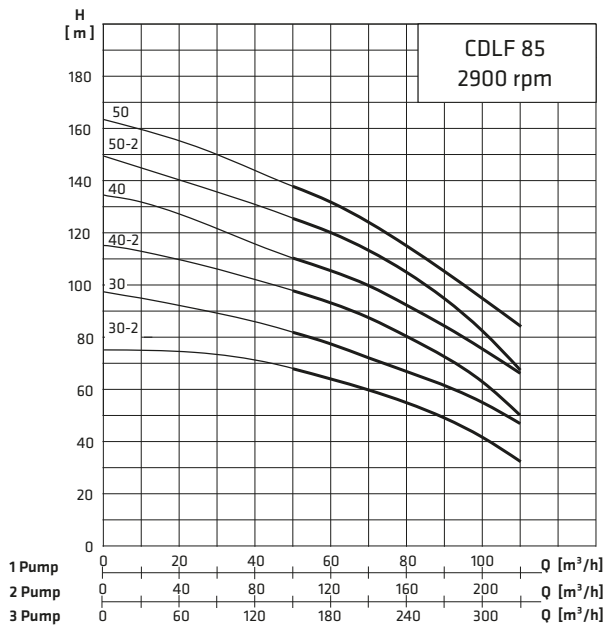
Pump Type	kW	De	Db	Ba	Bb	H	Ka	Kb	E	A	Tas.	KG
TH-2xCDLF 42-20	7.5					1250						332
TH-2xCDLF 42-30	11					1500						493
TH-2xCDLF 42-40	15	5"	5"	850	1075	1600	810	935	1035	285	B	521
TH-2xCDLF 42-50	18.5					1750						569
TH-2xCDLF 42-60	22					1850						649

Pump Type	kW	De	Db	Ba	Bb	H	Ka	Kb	E	A	Tas.	KG
TH-3xCDLF 42-20	7.5					1250						500
TH-3xCDLF 42-30	11					1500						739
TH-3xCDLF 42-40	15	6"	6"	1300	1100	1600	1260	960	1060	285	B	786
TH-3xCDLF 42-50	18.5					1750						858
TH-3xCDLF 42-60	22					1850						978

The specified dimensions and weights are approximate. Dimensions might be changed.



Performance curves are given according to ISO9906:2012 Gr3B



Performance curves are given according to ISO9906:2012 Gr3B

Pump Type	kW	De	Db	Ba	Bb	H	Ka	Kb	E	A	Tas.	KG
TH-1xCDLF 65-20	11					1450						221
TH-1xCDLF 65-30-1	15					1550						236
TH-1xCDLF 65-40-2	18.5					1650						264
TH-1xCDLF 65-40	22	4"	4"	570	600	1700	530	460	585	320	B	297
TH-1xCDLF 65-50-1	30					1850						358
TH-1xCDLF 65-60-1	37					1950						388

Pump Type	kW	De	Db	Ba	Bb	H	Ka	Kb	E	A	Tas.	KG
TH-2xCDLF 65-20	11					1500						486
TH-2xCDLF 65-30-1	15					1550						531
TH-2xCDLF 65-40-2	18.5					1700						592
TH-2xCDLF 65-40	22	6"	6"	850	1150	1750	810	1010	1085	320	B	663
TH-2xCDLF 65-50-1	30					1900						785
TH-2xCDLF 65-60-1	37					2000						850

Pump Type	kW	De	Db	Ba	Bb	H	Ka	Kb	E	A	Tas.	KG
TH-3xCDLF 65-20	11					1500						731
TH-3xCDLF 65-30-1	15					1550						796
TH-3xCDLF 65-40-2	18.5					1700						885
TH-3xCDLF 65-40	22	8"	8"	1300	1150	1750	1260	1010	1110	320	B	984
TH-3xCDLF 65-50-1	30					1900						1167
TH-3xCDLF 65-60-1	37					2000						1262

Pump Type	kW	De	Db	Ba	Bb	H	Ka	Kb	E	A	Tas.	KG
TH-1xCDLF 85-30-2	18.5					1650						254
TH-1xCDLF 85-30	22					1700						291
TH-1xCDLF 85-40-2	30					1850						351
TH-1xCDLF 85-40	30	4"	4"	570	600	1850	530	460	600	340	B	351
TH-1xCDLF 85-50-2	37					1950						375
TH-1xCDLF 85-50	37					1950						375

Pump Type	kW	De	Db	Ba	Bb	H	Ka	Kb	E	A	Tas.	KG
TH-2xCDLF 85-30-2	18.5					1700						562
TH-2xCDLF 85-30	22					1700						651
TH-2xCDLF 85-40-2	30					1900						776
TH-2xCDLF 85-40	30	6"	6"	850	1150	1900	810	1010	1125	340	B	781
TH-2xCDLF 85-50-2	37					2000						829
TH-2xCDLF 85-50	37					2000						834

Pump Type	kW	De	Db	Ba	Bb	H	Ka	Kb	E	A	Tas.	KG
TH-3xCDLF 85-30-2	18.5					1700						860
TH-3xCDLF 85-30	22					1700						991
TH-3xCDLF 85-40-2	30					1900						1176
TH-3xCDLF 85-40	30	8"	8"	1300	1250	1900	1260	1110	1180	340	B	1176
TH-3xCDLF 85-50-2	37					2000						1248
TH-3xCDLF 85-50	37					2000						1253

The specified dimensions and weights are approximate. Dimensions might be changed.