

NOCCHI CPS3-10

THREE-PHASE ELECTRONIC FREQUENCY CONVERTER

EASY TO INSTALL, LOW ENERGY CONSUMPTION, COMPACT SIZE

CPS 3-10 is an electronic device designed to vary the frequency of an electric pump. It is incorporated directly on the motor to enable control of the speed to provide the utility with a constant pressure even in the event of changes in water demands. CPS offers a compact, essential, reliable and practical solution, also designed to ensure the utmost comfort and benefits when applied a wide range of sectors, such as irrigation, Pressure booster systems and water transfer, residential, commercial and industrial applications. The CPS range features a discreet and stylish design with a back lit graphic display that updates the user in real time on all operating parameters.

This operating principle of this device is simple and effective. CPS supplies the electric motor of the pump where it is installed and, via a feedback system using a pressure transducer, varies the power supply frequency of the electric motor according to changes in water demands, with the aim of maintaining

constant pressure levels on outlet from the pump according to a set point value set on the device. CPS ensures high levels of efficiency and improved flexibility in performance, guaranteeing optimal savings in energy and eliminating the need for supplementary control devices. The range offers a host of functions:

- Pressure measurement with the option of managing 2 separate levels settable via an internal timer or via an external connection;
- Start and stop;
- Internal clock;
- Calculation of motor speed;
- Protection against dry-running;
- Protection against overcurrent and undercurrent;
- Protection against overvoltage and undervoltage.



APPLICATIONS

- Pressure booster systems
- Water supply
- Industry
- Construction
- Washing

PROTECTION DEVICES

- Dry-running
- Current overload
- Electronics overheating
- System disable via external contact

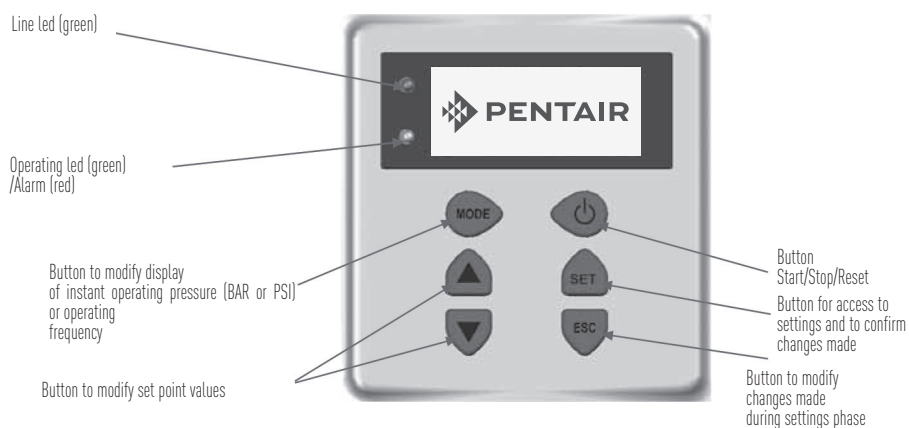
TECHNICAL SPECIFICATIONS

- Power supply voltage: inverter 3x380 - 3x500 Vac $\pm$ 10% sinusoidal 50/60 Hz
- Inverter output voltage: 3x400 Vac $\pm$ 10 %
- Maximum nominal power: 7.5 kW
- Input frequency: 50/60 Hz + 3%
- Maximum nominal output current: 16 A
- Protection rating IP55 (if installed on motors with protection rating of IP55 or higher)
- Ambient temperature from +0°C to 50°C
- Waveform: sinusoidal
- Inlet filter compliant with EMC directive
- Pressure transducer 0 - 5 Volt - 0 - 10 Bar 0 - 20 Bar depending on pump model
- Set-point 2
- Interface connectivity: RS 485 serial port
- 3 optional contacts (external set-point, alarm, system disable)

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CONTROL PANEL

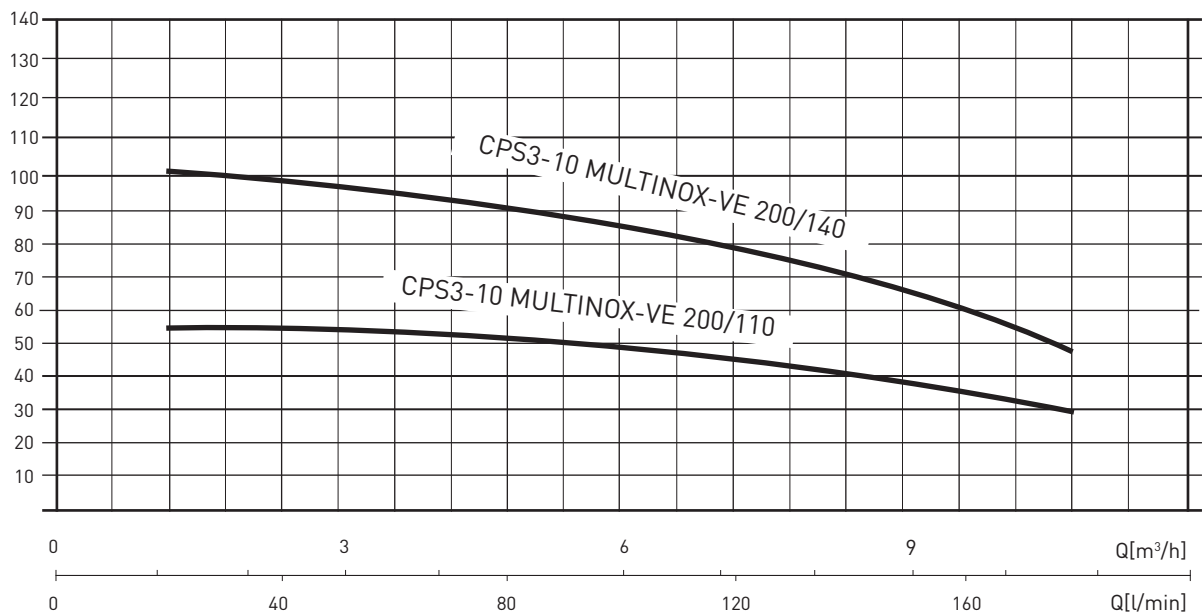


- Backlit display (automatic shutoff after a set time and illumination by pressing any key)
- Bar graph indicating percentage of motor use
- Display of weekdays
- Display of instant values / set parameters / clock / alarm messages / etc.
- Signal of access to programming
- Unit of measurement of parameter displayed

NOCCHI CPS3-10 MULTINOX-VE

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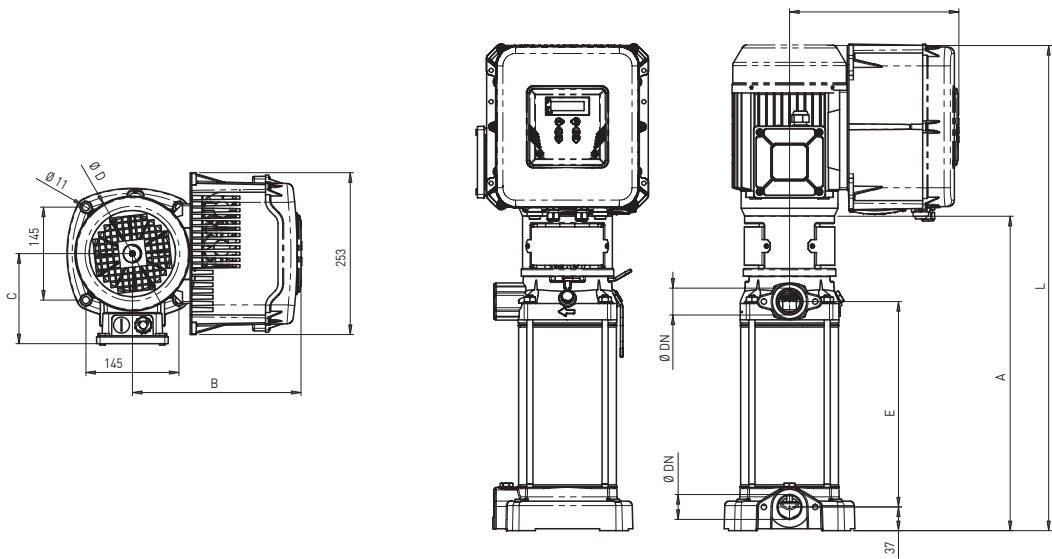
HYDRAULIC PERFORMANCE



MEI ≥ 0.1 - MEI reference ≥ 0.70 - The reference efficiency information is available on the website: www.europump.org/efficiencycharts
 For efficiency data, see electric pump series MULTINOX-VE

PERFORMANCE TABLE

MODEL	P2		Volt	In (A)	Q	L/min	20	60	100	140	180
	HP	kW				m³/h	1.2	3.6	6	8.4	10.8
CPS3-10 MULTINOX-VE 200/110	3.5	2.6	3 ~ 400	7	m.c.a./ m.w.c.		54	51	46	39	30
CPS3-10 MULTINOX-VE 200/140	5.5	4.0	3 ~ 400	8.2			100	94	85	72	55



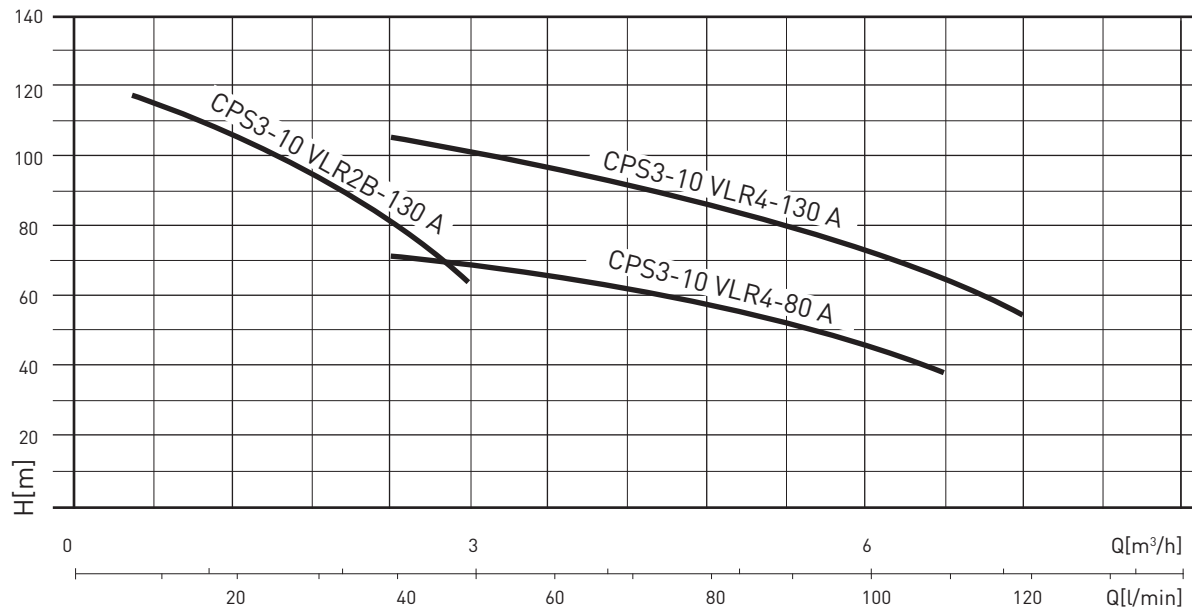
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions (mm)							Weight kg
	A	B	C	D	E	DN	L	
CPS3-10 MULTINOX-VE 200/110	491	265	140	177	320	1"1/4	760	42
CPS3-10 MULTINOX-VE 200/140	575	275	145	198	404	1"1/4	875	45

NOCCHI CPS3-10 VLR

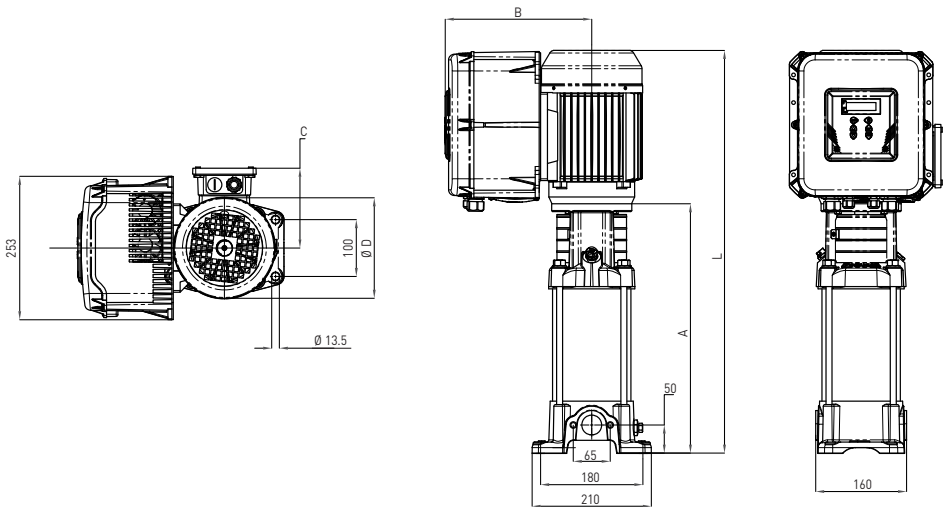
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HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	P2		Volt	In [A]	Q	L/min	10	20	30	40	50	60	80	100	120
	HP	kW				m³/h	0.6	1.2	1.8	2.4	3	3.6	4.8	6	7.2
CPS3-10 VLR 2B-130 A	2	1.5	3 ~ 400	3.7	m.c.a./m.w.c.	118	111	101	85	65					
CPS3-10 VLR 4-80 A	2	1.5	3 ~ 400	4					71	69	66	58	49	35	
CPS3-10 VLR 4-120 A	3	2.2	3 ~ 400	5.8					106	103	99	87	73	53	



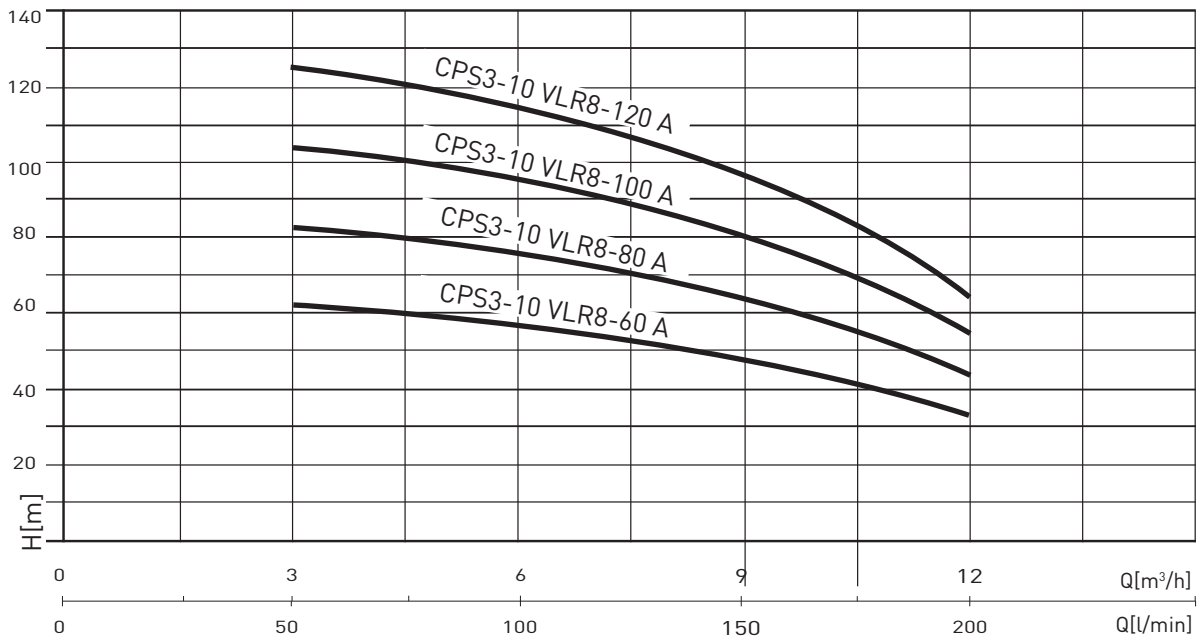
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions (mm)					Weight kg
	A	B	C	D	L	
CPS3-10 VLR 2B-130 A	440	258	140	177	725	43
CPS3-10 VLR 4-80 A	422	258	140	177	707	39
CPS3-10 VLR 4-120 A	530	258	140	177	815	43

NOCCHI CPS3-10 VLR

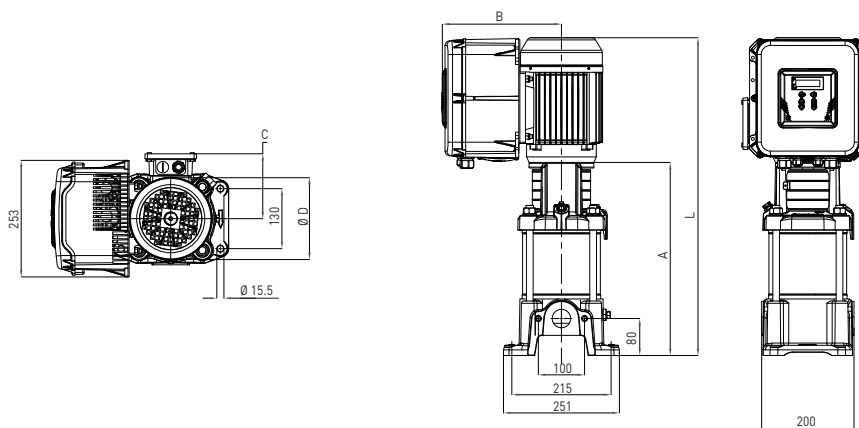
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HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	P2		Volt	In [A]	Q	L/min	50	100	150	175	200
	HP	kW				m³/h	3	6	9	10.5	12
CPS3-10 VLR 8-60 A	3	2.2	3 ~ 400	5.2	m.c.a./m.w.c.		62	58	48	41	33
CPS3-10 VLR 8-80 A	3	3	3 ~ 400	6.7			82	77	64	55	44
CPS3-10 VLR 8-100 A	5.5	3	3 ~ 400	8.2			103	96	80	69	55
CPS3-10 VLR 8-120 A	5.5	4	3 ~ 400	9.9			124	115	96	82	65



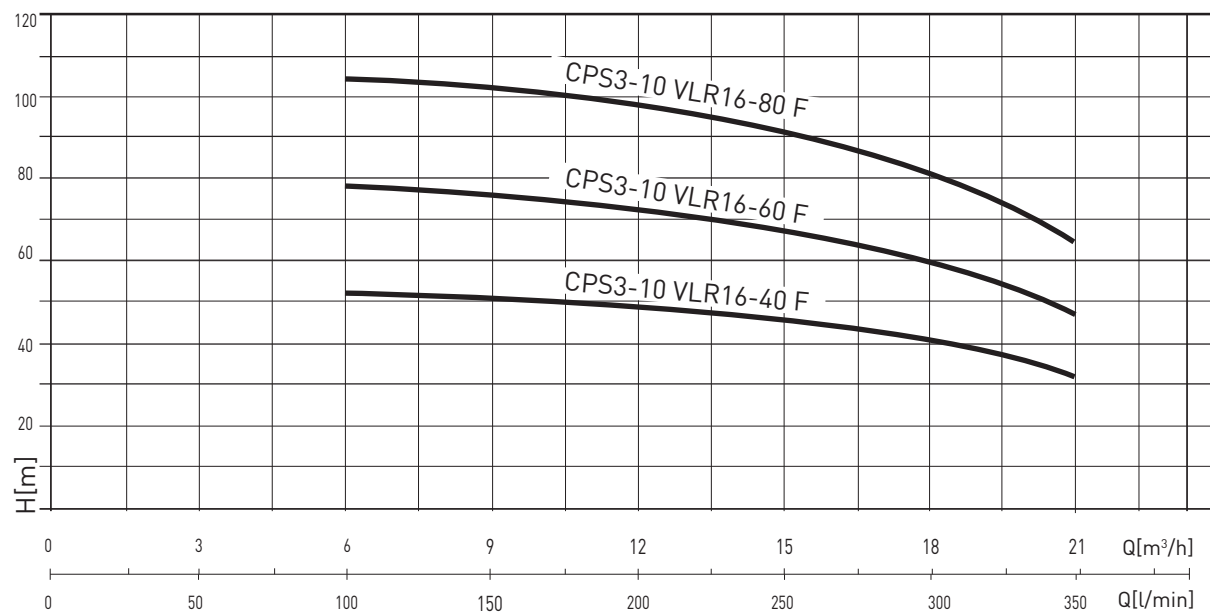
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions (mm)					Weight kg
	A	B	C	D	L	
CPS3-10 VLR 8-60 A	450	258	140	177	735	49
CPS3-10 VLR 8-80 A	515	268	145	198	832	57
CPS3-10 VLR 8-100 A	575	268	145	198	832	58
CPS3-10 VLR 8-120 A	635	268	145	198	952	62

NOCCHI CPS3-10 VLR

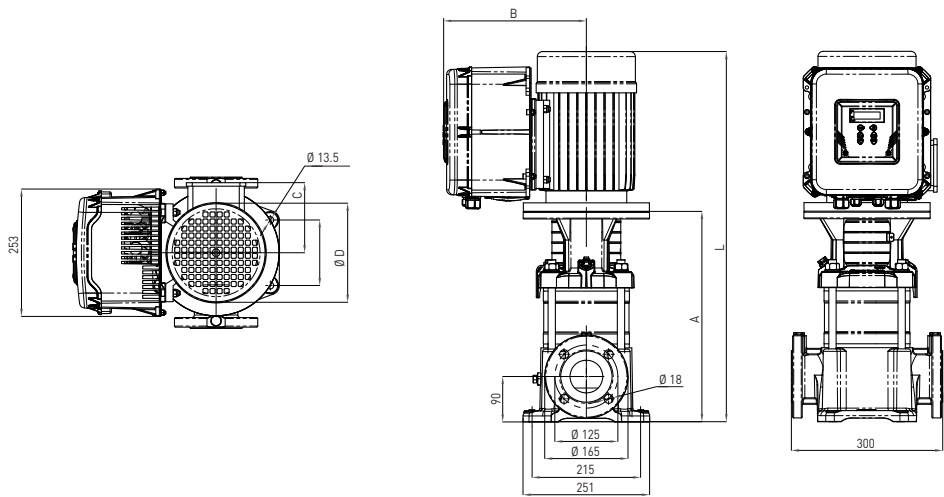
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HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	P2		Volt	In (A)	Q	L/min	100	200	250	300	350
	HP	kW				m³/h	6	12	15	18	21
CPS3-10 VLR 16-40 F	5.5	4.0	3 ~ 400	8.4	m.c.a./m.w.c.		52	49	46	40	32
CPS3-10 VLR 16-60 F	7.5	5.5	3 ~ 400	12.3			78	74	69	61	47
CPS3-10 VLR 16-80 F	10	7.5	3 ~ 400	15.1			104	98	92	81	63



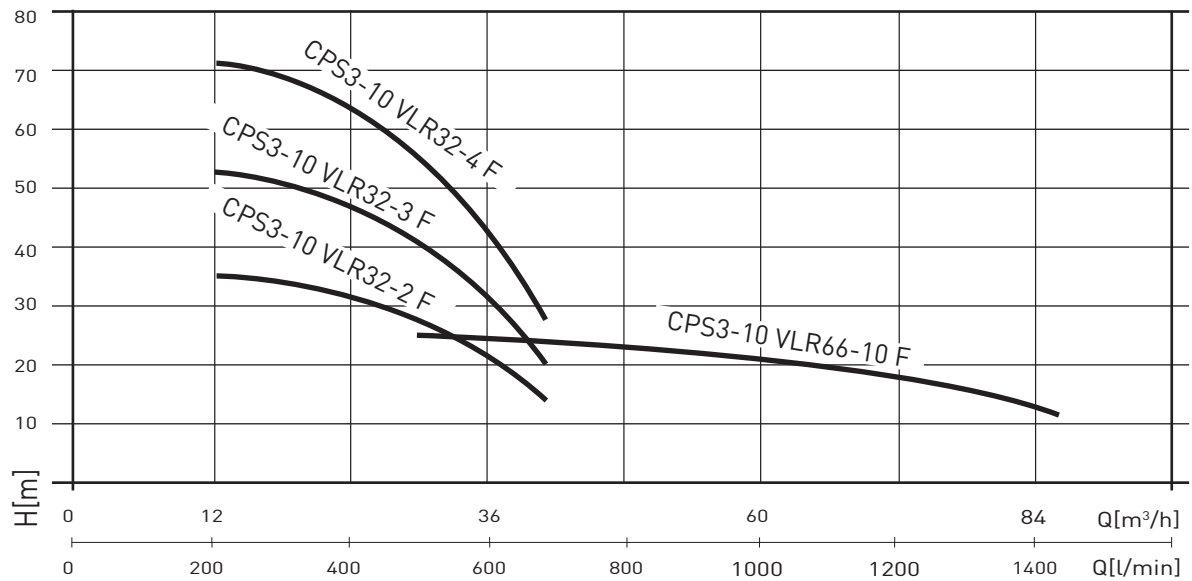
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions (mm)					Weight kg
	A	B	C	D	L	
CPS3-10 VLR 16-40 F	462	285	145	198	780	65
CPS3-10 VLR 16-60 F	573	315	185	260	970	90
CPS3-10 VLR 16-80 F	663	315	185	260	1100	98

NOCCHI CPS3-10 VLR

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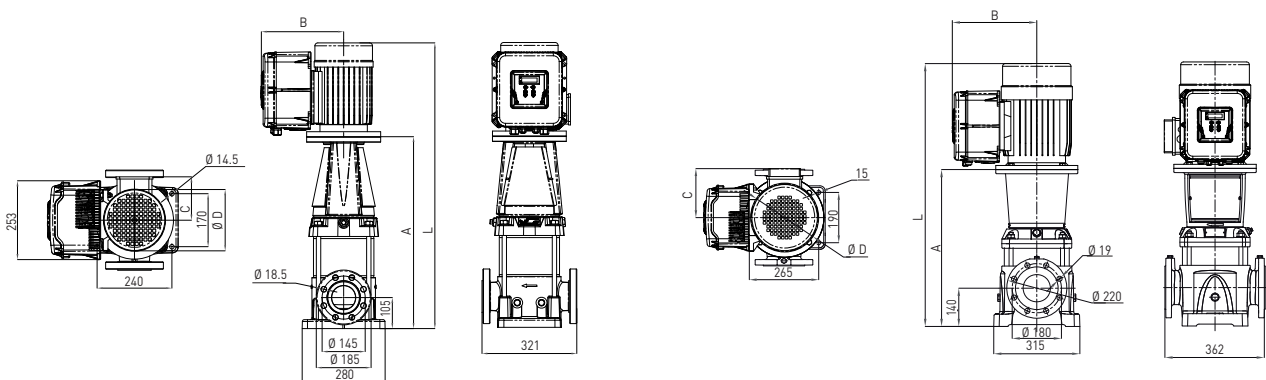
HYDRAULIC PERFORMANCE



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For efficiency data, see electric pump series VLR

PERFORMANCE TABLE

MODEL	P2		Volt	In (A)	Q	L/min	200	400	500	600	700	800	1000	1200	1300	1417
	HP	kW				m³/h	12	24	30	36	42	48	60	72	78	85
CPS3-10 VLR 32-2 F	5.5	4.0	3 ~ 400	8.5	m.c.a./m.w.c.	35	31	27	22	14						
CPS3-10 VLR 32-3 F	7.5	5.5	3 ~ 400	12.9		53	47	41	33	20						
CPS3-10 VLR 32-4 F	10	7.5	3 ~ 400	15.8		71	63	55	44	27						
CPS3-10 VLR 66-10 F	7.5	5.5	3 ~ 400	13.5				26	25	24	23	21	18	16	13	



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions (mm)					Weight kg
	A	B	C	D	L	
CPS3-10 VLR 32-2 F	650	285	145	220	975	100
CPS3-10 VLR 32-3 F	770	315	185	260	1160	110
CPS3-10 VLR 32-4 F	840	315	185	260	1270	127
CPS3-10 VLR 66-10 F	574	315	185	260	970	113