

**NOCCHI CPS3-20****THREE PHASE VARIABLE SPEED PRESSURE BOOSTERS WITH TWO ELECTRIC PUMPS**

EASY TO INSTALL, LOW ENERGY CONSUMPTION, VERSATILE OPERATION

The new series of variable speed pressure booster sets CPS3-20 offers a reliable and simple solution for residential and industrial applications. The system envisages the parallel installation of two electric pumps equipped with electronic control. The CPS3 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.

When the system pressure falls below the set threshold, the module starts up the pump to restore the set point pressure; the pump rotation speed varies according to water demand and therefore increases speed on requests

for increased quantities, through to the maximum setting. After this, if the system requires more output, the module activates the second pump in emergency mode to maintain stable pressure values. On decrease in water demand, the speed of the last activated pump is reduced through to shutdown. The module keeps the first activated pump running until the minimum set speed is reached, after which, if no pressure drops are detected, the pump is shut down. The CPS3-20 is equipped with five operating modes to respond to various operating requirements.

**TECHNICAL SPECIFICATIONS**

- Inverter power supply voltage: 3x380-500 Vac.
- Inverter output voltage: 3x380-500 Vac.
- Maximum output power: 2x5.5 kW - 2x7.5 kW.
- Input frequency: 50/60 Hz.
- Maximum nominal output current: 11.5 Amp - 16 Amp.
- Protection rating: IP55-VLR IP44-MULTINOX-VE.
- Maximum ambient temperature: +50°C.
- Inlet filter compliant with EMC directive.
- Pressure transducer: 0-5 Volt 0-10 bar.
- Connectivity: RS 485 serial interface.
- Optional contacts: 3 (external set-point, alarm, system inhibition).

**BASE**

- In galvanized sheet steel complete vibration damper feet.

**SUCTION MANIFOLD**

- In AISI 304 stainless steel with 2 ball valves:

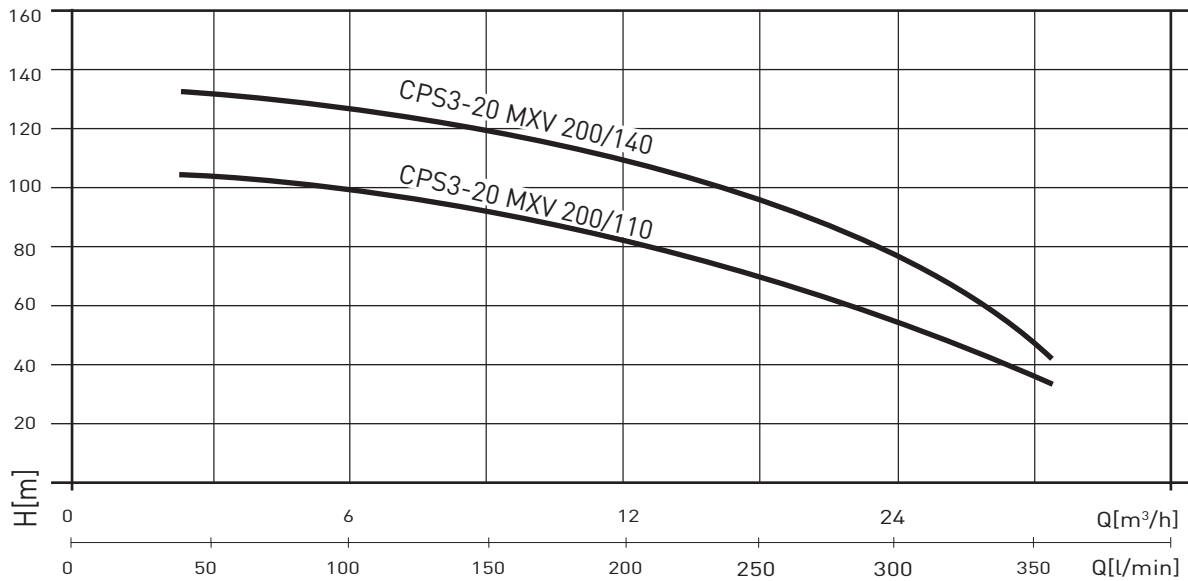
**DELIVERY MANIFOLD**

- In AISI 304 stainless steel with:
  - 2 ball valves
  - 2 check valves
  - 1 pressure gauge
  - 2 pressure sensors.

# NOCCHI CPS3-20

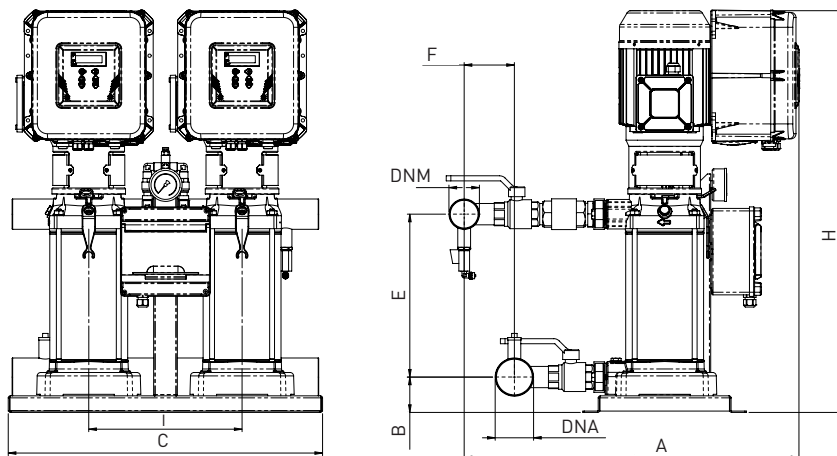
## THREE PHASE VARIABLE SPEED PRESSURE BOOSTERS WITH TWO ELECTRIC PUMPS

### HYDRAULIC PERFORMANCE



### PERFORMANCE TABLE

MODEL	P2		Volt	In (A)	Q	L/min	40	120	200	280	360
	HP	kW				m³/h	2.4	7.2	12.0	16.8	21.6
CPS3-20 MXV 200/110	2x3.5	2x2.6	3 - 400	2x7.4	m.c.a./ m.w.c.	101	96	83	64	39	
CPS3-20 MXV 200/140	2x5.5	2x4	3 - 400	2x9.7		134	125	106	82	46	



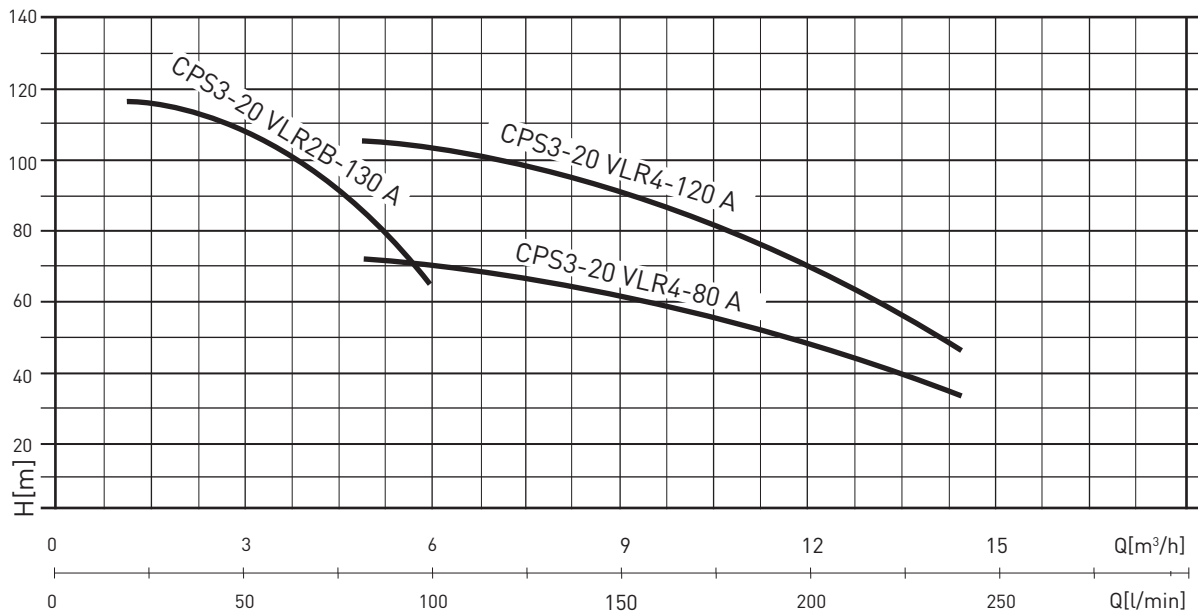
### OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions (mm)									Weight kg
	A	B	C	E	F	H	I	DNA	DNM	
CPS3-20 MXV 200/110	660	70	620	320	100	790	300	2"1/2	2"	110
CPS3-20 MXV 200/140	660	70	620	440	100	910	300	2"1/2	2"	116

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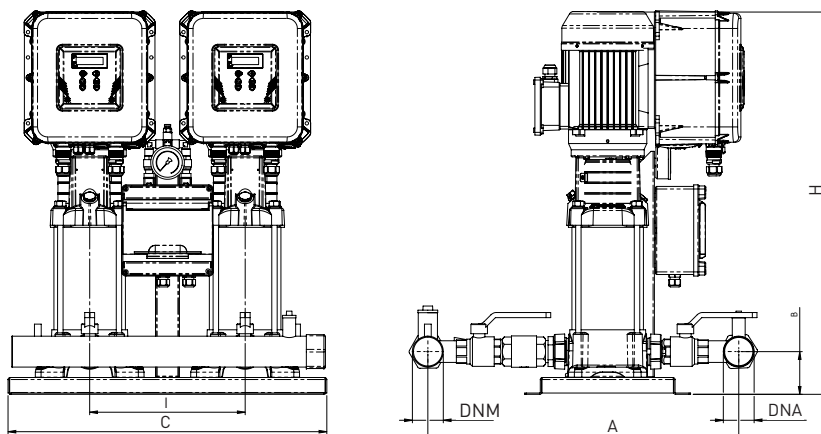
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### HYDRAULIC PERFORMANCE



### PERFORMANCE TABLE

MODEL	P2		Volt	In (A)	Q	L/min	20	40	60	80	100	120	160	200	240
	HP	kW				m³/h	1.2	2.4	3.6	4.8	6.0	7.2	9.6	12.0	14.4
CPS3-20 VLR 2B-130 A	2x2	2x1.5	3 - 400	2x3.8	m.c.a./m.w.c.	118	111	101	85	65					
CPS3-20 VLR 4-80 A	2x2	2x1.5	3 - 400	2x4.1					71	69	66	58	49	35	
CPS3-20 VLR 4-120 A	2x3	2x2.2	3 - 400	2x6					106	103	99	87	73	53	



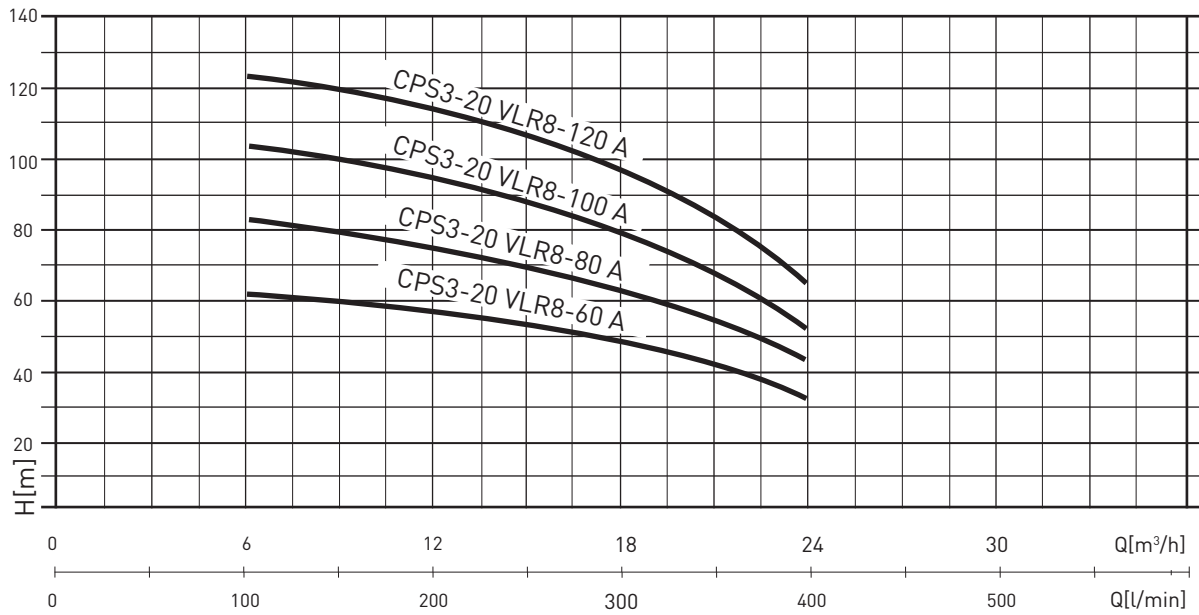
### OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions (mm)							Weight kg
	A	B	C	H	I	DNA	DNM	
CPS3-20 VLR 2B-130 A	600	85	620	760	300	2"	2"	110
CPS3-20 VLR 4-80 A	600	85	620	740	300	2"	2"	102
CPS3-20 VLR 4-120 A	600	85	620	845	300	2"	2"	110

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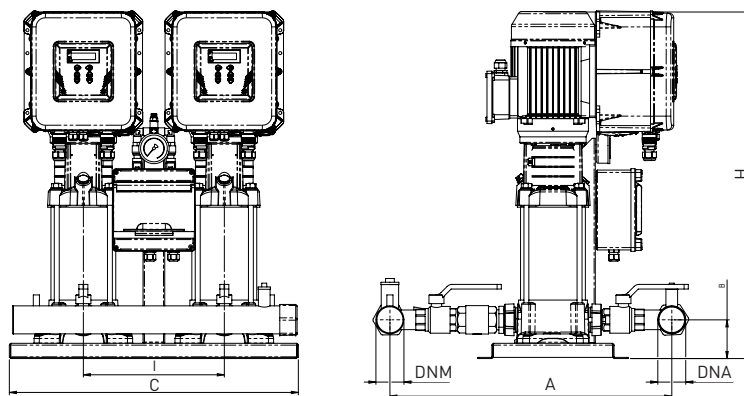
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### HYDRAULIC PERFORMANCE



### PERFORMANCE TABLE

MODEL	P2		Volt	In (A)	Q	L/min	100	200	300	350	400
	HP	kW				m³/h	6.0	12.0	18.0	21.0	24.0
CPS3-20 VLR 8-60 A	2x3	2x2.2	3 - 400	2x5.4	m.c.a./m.w.c.	62	58	48	41	33	
CPS3-20 VLR 8-80 A	2x4	2x3	3 - 400	2x7		82	77	64	55	44	
CPS3-20 VLR 8-100 A	2x5.5	2x4	3 - 400	2x8.3		103	96	80	69	55	
CPS3-20 VLR 8-120 A	2x5.5	2x4	3 - 400	2x10		124	115	96	82	65	



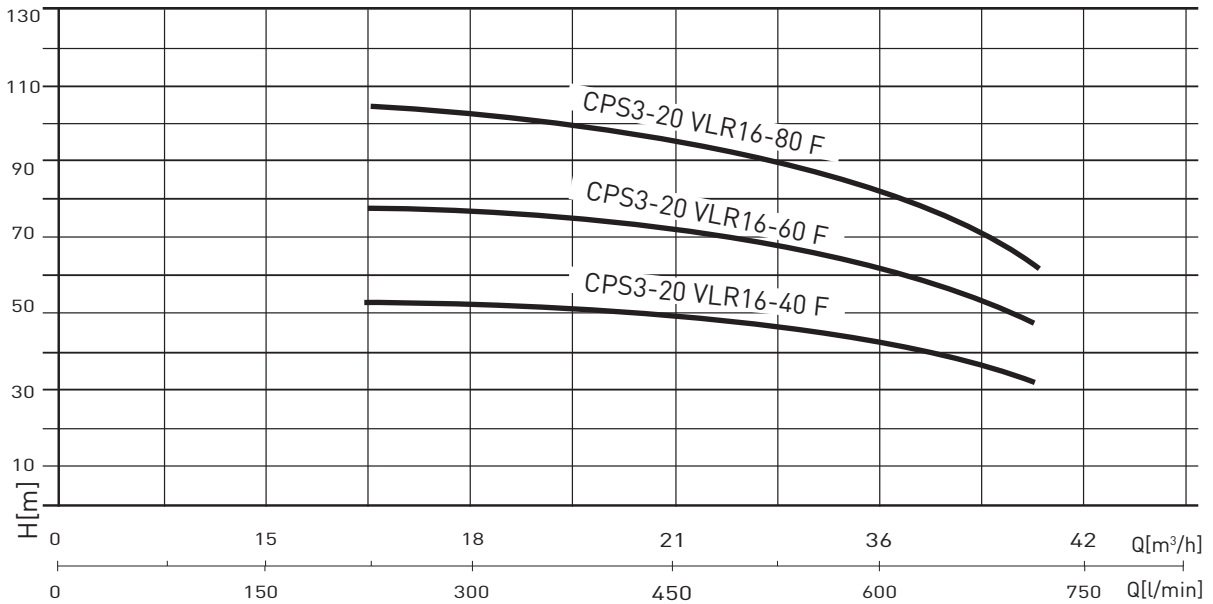
### OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions (mm)							Weight kg
	A	B	C	H	I	DNA	DNM	
CPS3-20 VLR 8-60 A	670	115	620	770	300	2"1/2	2"1/2	130
CPS3-20 VLR 8-80 A	670	115	620	870	300	2"1/2	2"1/2	145
CPS3-20 VLR 8-100 A	670	115	620	920	300	2"1/2	2"1/2	147
CPS3-20 VLR 8-120 A	670	115	620	980	300	2"1/2	2"1/2	155

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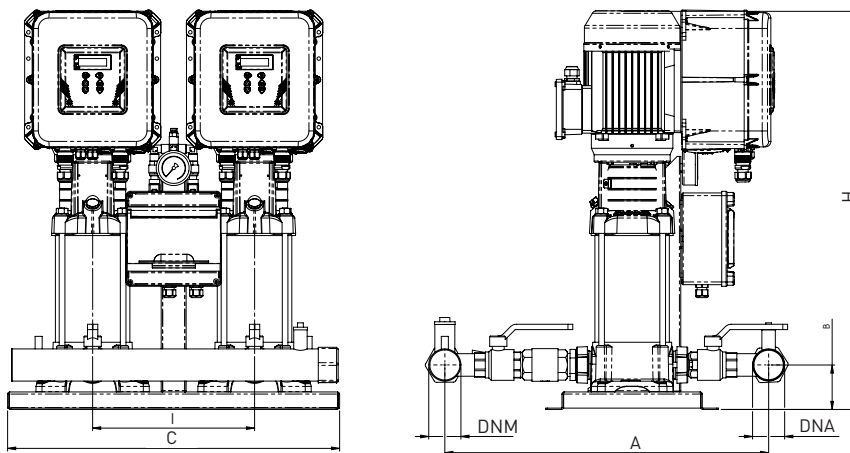
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### HYDRAULIC PERFORMANCE



### PERFORMANCE TABLE

MODEL	P2		Volt	In (A)	Q	L/min	200	400	500	600	700
	HP	kW				m³/h	12.0	24.0	30.0	36.0	42.0
CPS3-20 VLR 16-40 F	2x5.5	2x4	3 - 400	2x8.5	m.c.a./m.w.c.	52	49	46	40	32	
CPS3-20 VLR 16-60 F	2x7.5	2x5.5	3 - 400	2x12.5		78	74	69	61	47	
CPS3-20 VLR 16-80 F	2x10	2x7.5	3 - 400	2x16.8		104	98	92	81	63	



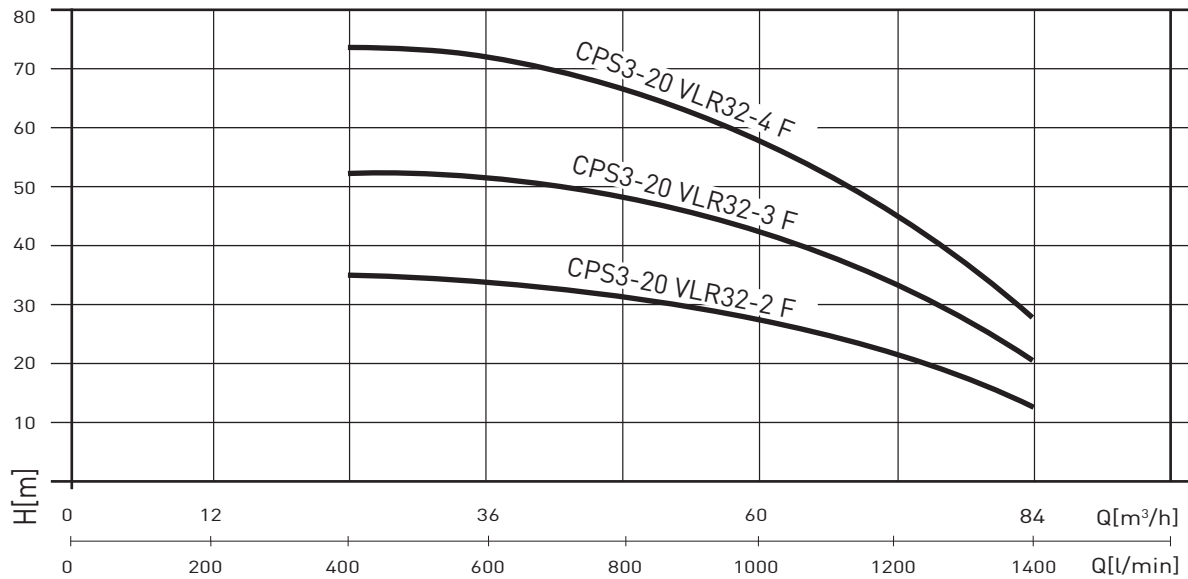
### OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions (mm)							Weight kg
	A	B	C	H	I	DNA	DNM	
CPS3-20 VLR 16-40 F	850	125	710	815	360	3"	3"	160
CPS3-20 VLR 16-60 F	850	125	710	1000	360	3"	3"	210
CPS3-20 VLR 16-80 F	850	125	710	1130	360	3"	3"	226

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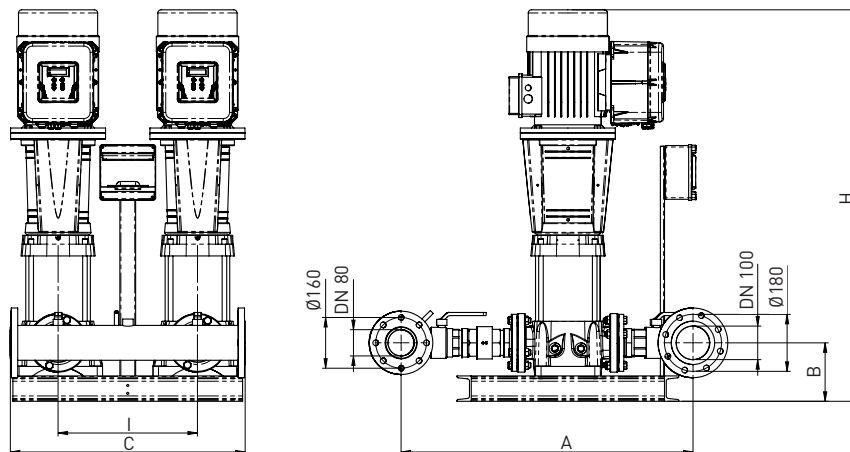
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### HYDRAULIC PERFORMANCE



### PERFORMANCE TABLE

MODEL	P2		Volt	In (A)	Q	L/min	400	600	1000	1200	1400
	HP	kW				m³/h	24.0	36.0	60.0	72.0	84.0
CPS3-20 VLR 32-2 F	2x5.5	2x4	3 ~ 400	2x8.7	m.c.a./m.w.c.	35	31	27	22	14	
CPS3-20 VLR 32-3 F	2x7.5	2x5.5	3 ~ 400	2x13.5		53	47	41	33	20	
CPS3-20 VLR 32-4 F	2x10	2x7.5	3 ~ 400	2x17.8		71	63	55	44	27	



### OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions (mm)					Weight kg
	A	B	C	H	I	
CPS3-20 VLR 32-2 F	950	185	750	1055	440	300
CPS3-20 VLR 32-3 F	950	185	750	1240	440	320
CPS3-20 VLR 32-4 F	950	185	750	1350	440	360