

---

## CIRCULATORS FOR HEATING AND AIR CONDITIONING SYSTEMS



A



D



B



---

## GENERAL DATA

### Applications

Pump for hot or cold water circulation in small community central heating and air conditioning systems for both civil and industrial applications, of the closed circuit pressurized or open circuit type.

### Construction features

Pump body in cast iron and motor in die cast aluminium.

Impeller in technopolymer, motor shaft in hardened stainless steel held in graphite bearings lubricated by the pumping medium.

Pump body with threaded ports.

Rotor protective jacket, stator jacket, and closing flange in stainless steel.

The two-pole asynchronous wet rotor motor features three-speed operation.

Integral thermal probe in single-phase version.

Protection rating: IP 44

Insulation class: F

Cable gland: PG 11

Installation: with horizontal motor shaft

Standard voltage input: single-phase 230 V / 50 Hz

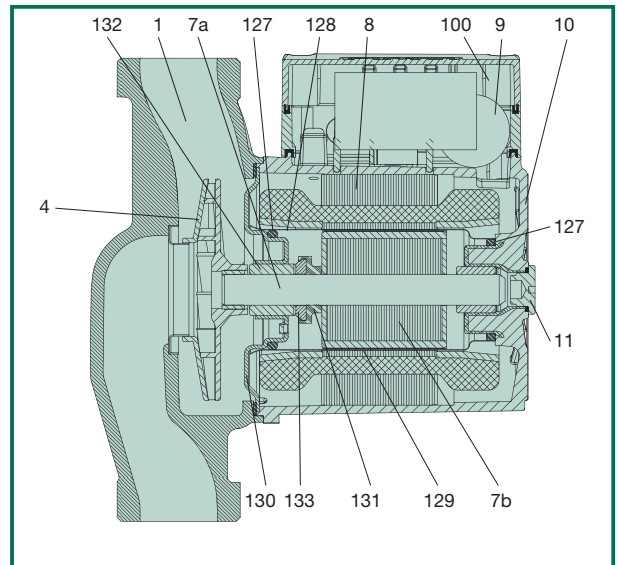
three-phase 400 V / 50 Hz

This product complies with European standard EN 60335-2-51

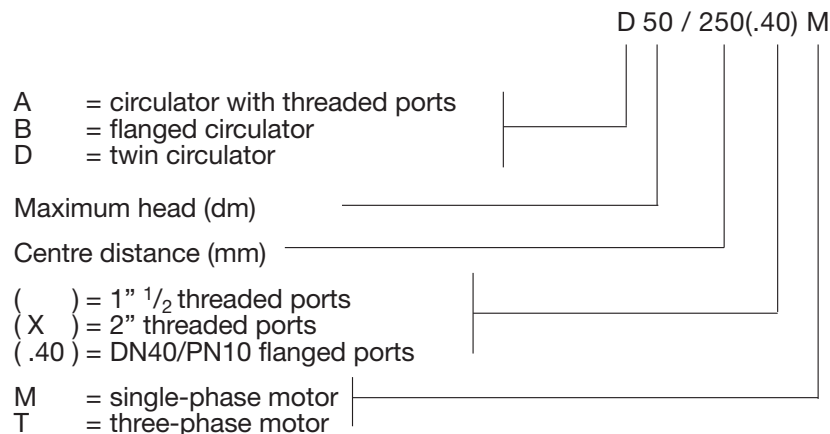
# CIRCULATORS FOR HEATING AND AIR CONDITIONING SYSTEMS

## TECHNICAL DATA

N.	PARTS	MATERIALS
1	PUMP BODY	CAST IRON
4	IMPELLER	TECHNOPOLYMER
7A	MOTOR SHAFT	STAINLESS STEEL
7B	ROTOR	-
8	STATOR	-
9	CAPACITOR	-
10	MOTOR CASING	DIE CAST ALUMINIUM
11	BREATHER PLUG	BRASS
100	TERMINAL BOX	-
127	SEAL RING	ETHYLENE PROPYLENE
128	STATOR JACKET	STAINLESS STEEL
129	ROTOR JACKET	STAINLESS STEEL
130	CLOSING FLANGE	STAINLESS STEEL
131	THRUST RING SUPPORT	ETHYLENE PROPYLENE
132	BUSHINGS	GRAPHITE
133	THRUST RING	CERAMIC



- Designation index:  
(example)



Operating range:	from 1 to 12 m <sup>3</sup> /h with head of up to 11 m.
Liquid temperature range:	from -10°C to +110°C
Liquid quality requirements:	clean, free of solid contaminants and mineral oils, non-viscous, chemically neutral, close to the properties of water <b>(max. glycol contents 30%).</b>
Maximum working pressure:	10 bar (1000 kPa).
Minimum suction pressure:	the values are given in the relative tables.
Installation:	with HORIZONTAL MOTOR SHAFT on discharge or return pipe, with suction port as close as possible to expansion vessel, above maximum boiler level and as far as possible from bends, elbows, and circuit branches to avoid water turbulence with consequent noise.
SPECIAL executions on request:	alternative voltages and/or frequencies
Accessories:	1/2" F - 3/4" F - 1" F - 1 1/4" F - 1 1/4" M unions DN40/PN10 counter-flanges

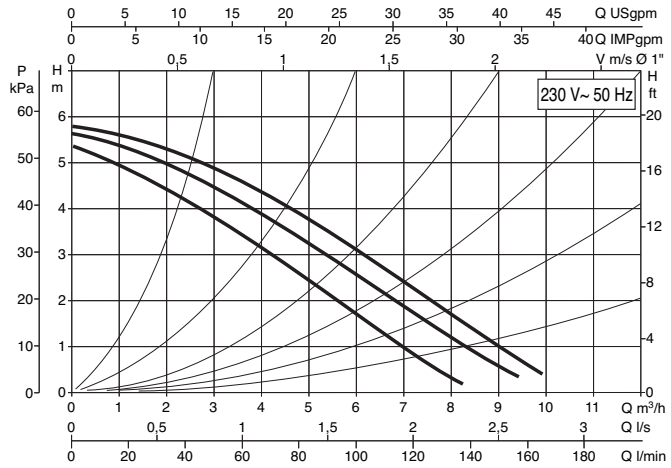
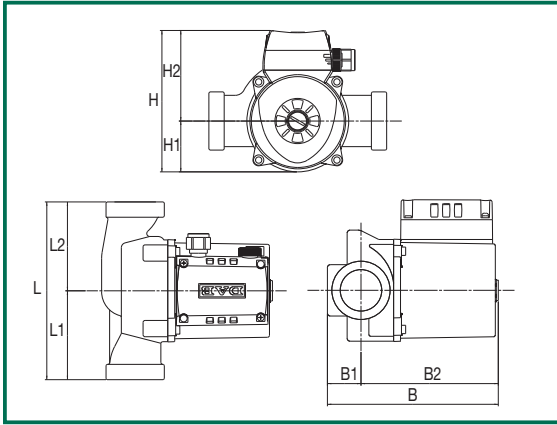
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equivalent to 1000 kg/m<sup>3</sup>. Tolerance of curves to ISO 9906.

# CIRCULATORS FOR HEATING AND AIR CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C  
 Maximum working pressure: 10 bar (1000 kPa)

## A 50/180 XM

SINGLE WITH UNIONS - SINGLE-PHASE

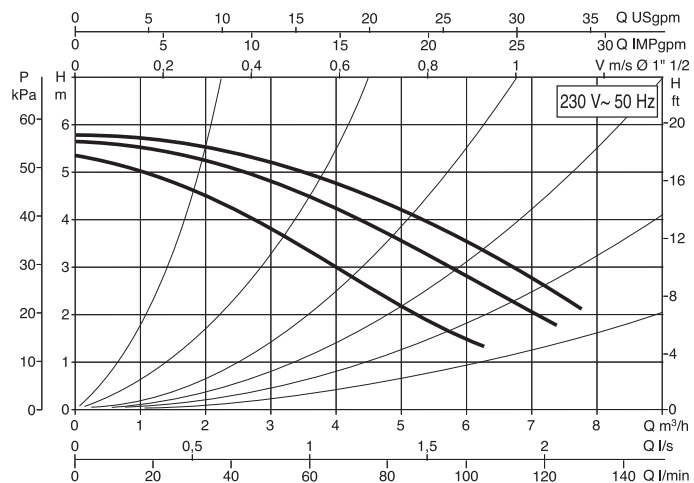
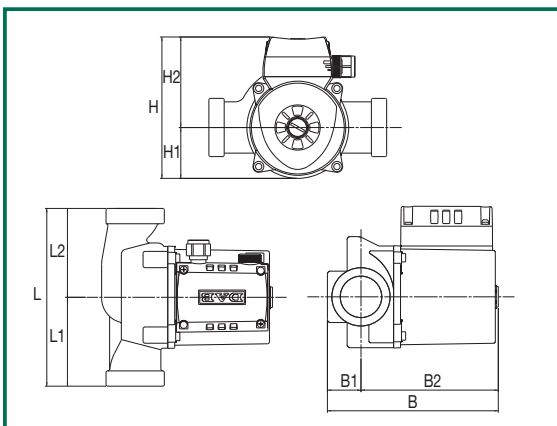


L	L1	L2	B	B1	B2	H	H1	H2	F	PACK DIMENSIONS			VOLUME m <sup>3</sup>	WEIGHT Kg
										L	B	H		
180	90	90	173	34	139	143	52	92	2" G	206	170	180	0,066	5,3

MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA						MINIMUM SUCTION PRESSURE
				SPEED	rpm	P1 MAX W	In A	CAPACITOR		
A 50/180 XM	1x230 V~	180	1 1/4"	3	2791	184	0,92	4	400	t° +90°C m.c.a. 1,5
				2	2651	189	0,92			
				1	2297	168	0,80			

## A 50/180 M

SINGLE WITH UNIONS - SINGLE-PHASE



L	L1	L2	B	B1	B2	H	H1	H2	F	PACK DIMENSIONS			VOLUME m <sup>3</sup>	WEIGHT Kg
										L	B	H		
180	90	90	173	34	139	143	52	92	1" 1/2	206	170	180	0,066	5

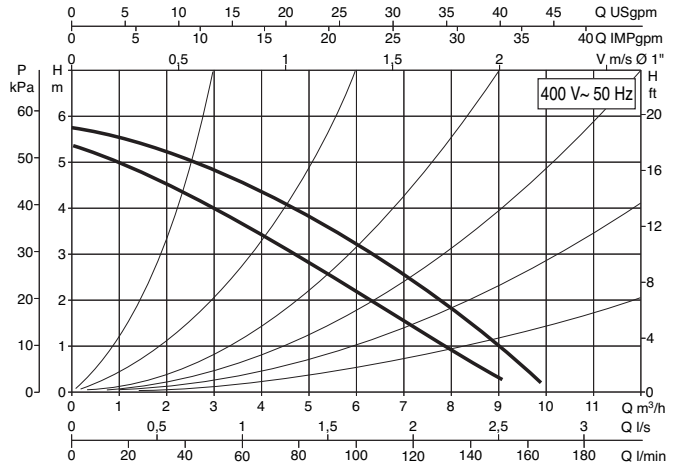
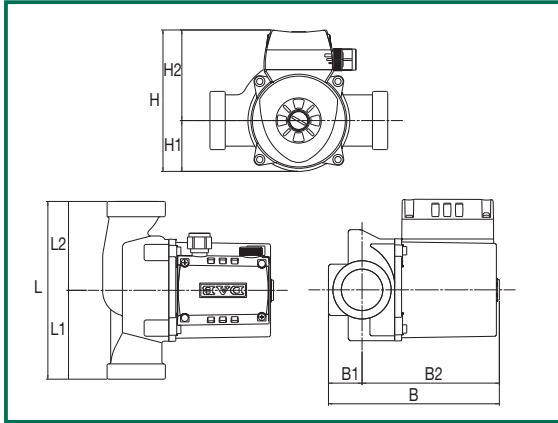
MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA						MINIMUM SUCTION PRESSURE
				SPEED	rpm	P1 MAX W	In A	CAPACITOR		
A 50/180 M	1x230 V~	180	1"	3	2766	195	0,95	4	400	t° +90°C m.c.a. 1,5
				2	2616	194	0,95			
				1	2215	180	0,85			

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equivalent to 1000 kg/m<sup>3</sup>. Tolerance of curves to ISO 9906.

# CIRCULATORS FOR HEATING AND AIR CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C  
 Maximum working pressure: 10 bar (1000 kPa)

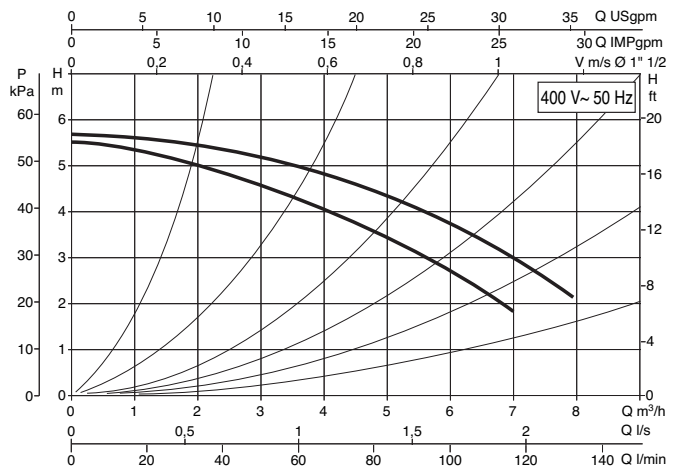
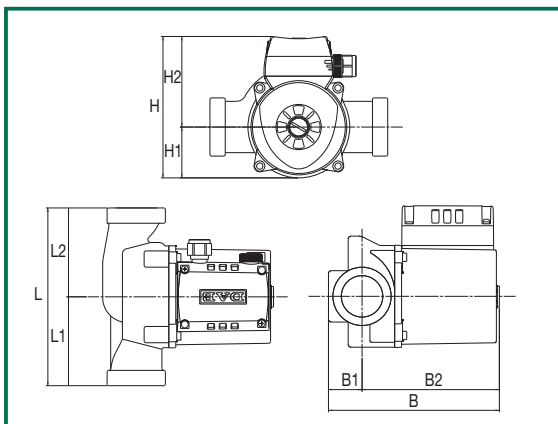
## A 50/180 XT SINGLE WITH UNIONS - THREE-PHASE



L	L1	L2	B	B1	B2	H	H1	H2	F	PACK DIMENSIONS			VOLUME	WEIGHT
										L	B	H	m <sup>3</sup>	Kg
180	90	90	173	34	139	143	52	92	2" G	206	170	180	0,066	5,2

MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA						MINIMUM SUCTION PRESSURE
				SPEED	rpm	P1 MAX W	In A	CAPACITOR		
				μF	Vc					
A 50/180 XT	3x400 V ~	180	1" 1/4	2	2838	201	0,50	-	-	t° +90°C m.c.a. 1,5
				1	2520	129	0,23			

## A 50/180 T SINGLE WITH UNIONS - THREE-PHASE



L	L1	L2	B	B1	B2	H	H1	H2	F	PACK DIMENSIONS			VOLUME	WEIGHT
										L	B	H	m <sup>3</sup>	Kg
180	90	90	173	34	139	143	52	92	1" 1/2	206	170	180	0,066	5,3

MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA						MINIMUM SUCTION PRESSURE
				SPEED	rpm	P1 MAX W	In A	CAPACITOR		
				μF	Vc					
A 50/180 T	3x400 V ~	180	1"	2	2827	197	0,52	-	-	t° +90°C m.c.a. 1,5
				1	2502	139	0,25			

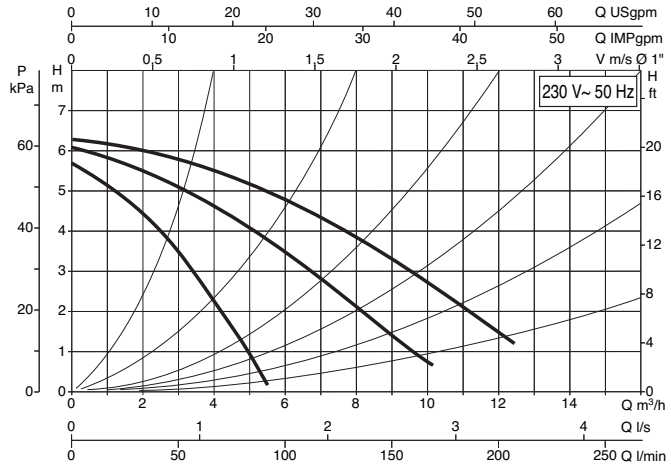
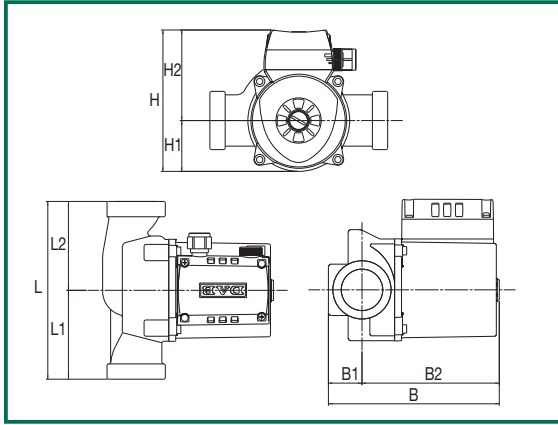
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equivalent to 1000 kg/m<sup>3</sup>. Tolerance of curves to ISO 9906.

# CIRCULATORS FOR HEATING AND AIR CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C  
 Maximum working pressure: 10 bar (1000 kPa)

## A 56/180 XM

SINGLE WITH UNIONS - SINGLE-PHASE

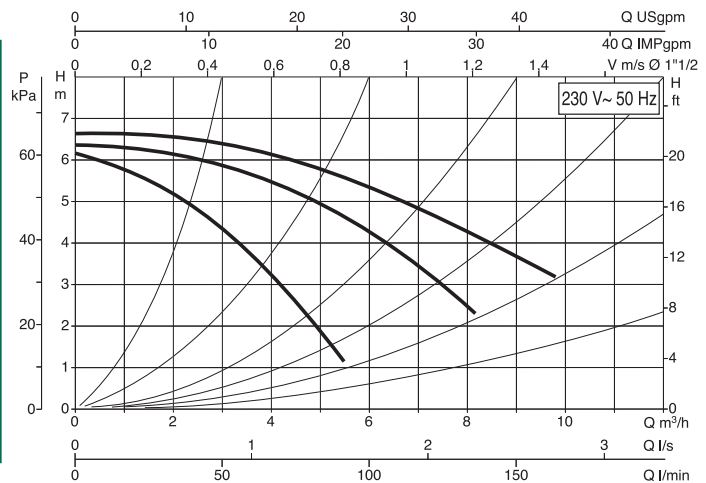
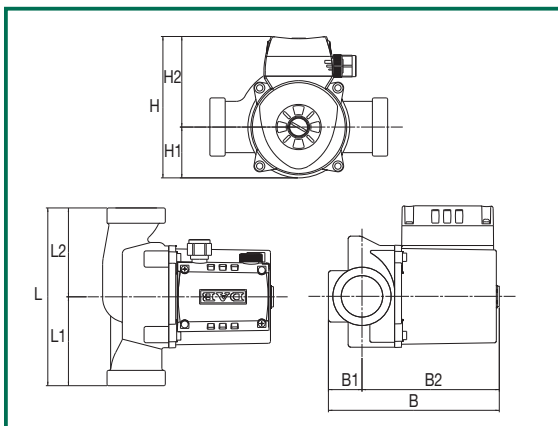


L	L1	L2	B	B1	B2	H	H1	H2	F	PACK DIMENSIONS			VOLUME	WEIGHT
										L	B	H	m <sup>3</sup>	Kg
180	90	90	173	34	139	143	52	92	2" G	206	170	180	0,066	5,3

MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA						MINIMUM SUCTION PRESSURE
				SPEED	rpm	P1 MAX W	In A	CAPACITOR		
								µF	Vc	
A 56/180 XM	1x230 V~	180	1" 1/4	3	2658	271	1,18	7	400	t° +90°C m.c.a. 1,5
				2	2117	294	1,32			
				1	1394	224	1,00			

## A 56/180 M

SINGLE WITH UNIONS - SINGLE-PHASE



L	L1	L2	B	B1	B2	H	H1	H2	F	PACK DIMENSIONS			VOLUME	WEIGHT
										L	B	H	m <sup>3</sup>	Kg
180	90	90	173	34	139	143	52	92	1" 1/2	206	170	180	0,066	5,3

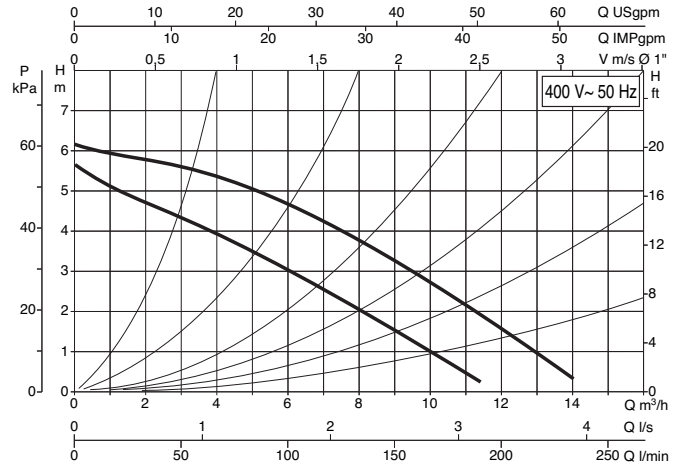
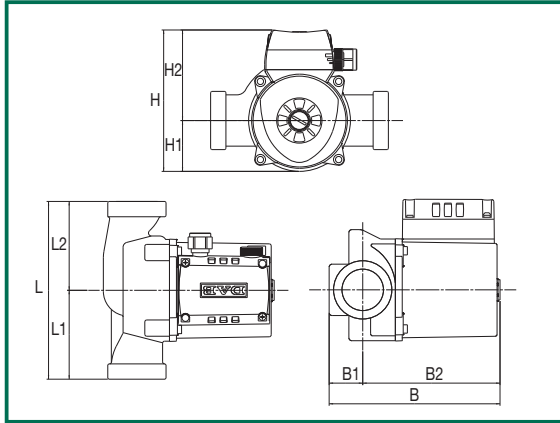
MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA						MINIMUM SUCTION PRESSURE
				SPEED	rpm	P1 MAX W	In A	CAPACITOR		
								µF	Vc	
A 56/180 M	1x230 V~	180	1"	3	2636	282	1,23	7	400	t° +90°C m.c.a. 1,5
				2	2226	287	1,30			
				1	1485	228	1,06			

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equivalent to 1000 kg/m<sup>3</sup>. Tolerance of curves to ISO 9906.

# CIRCULATORS FOR HEATING AND AIR CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C  
 Maximum working pressure: 10 bar (1000 kPa)

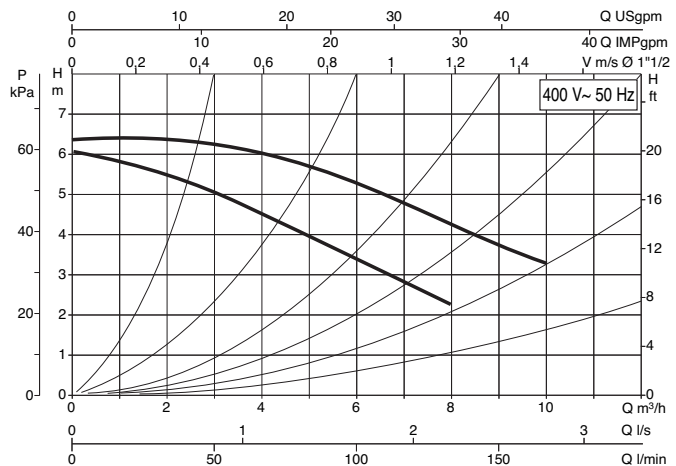
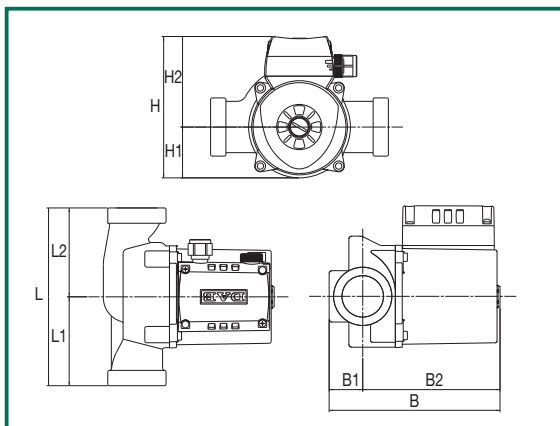
## A 56/180 XT SINGLE WITH UNIONS - THREE-PHASE



L	L1	L2	B	B1	B2	H	H1	H2	F	PACK DIMENSIONS			VOLUME	WEIGHT
										L	B	H	m <sup>3</sup>	Kg
180	90	90	173	34	139	143	52	92	2" G	206	170	180	0,066	5,3

MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA						MINIMUM SUCTION PRESSURE
				SPEED	rpm	P1 MAX W	In A	CAPACITOR		
				μF	Vc					
A 56/180 XT	3x400 V ~	180	1" 1/4	2	2708	291	0,60	-	-	t° +90°C m.c.a. 1,5
				1	2178	200	0,32	-	-	

## A 56/180 T SINGLE WITH UNIONS - THREE-PHASE



L	L1	L2	B	B1	B2	H	H1	H2	F	PACK DIMENSIONS			VOLUME	WEIGHT
										L	B	H	m <sup>3</sup>	Kg
180	90	90	173	34	139	143	52	92	1" 1/2	206	170	180	0,066	5,2

MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA						MINIMUM SUCTION PRESSURE
				SPEED	rpm	P1 MAX W	In A	CAPACITOR		
				μF	Vc					
A 56/180 T	3x400 V ~	180	1"	2	2704	294	0,60	-	-	t° +90°C m.c.a. 1,5
				1	2178	200	0,33	-	-	

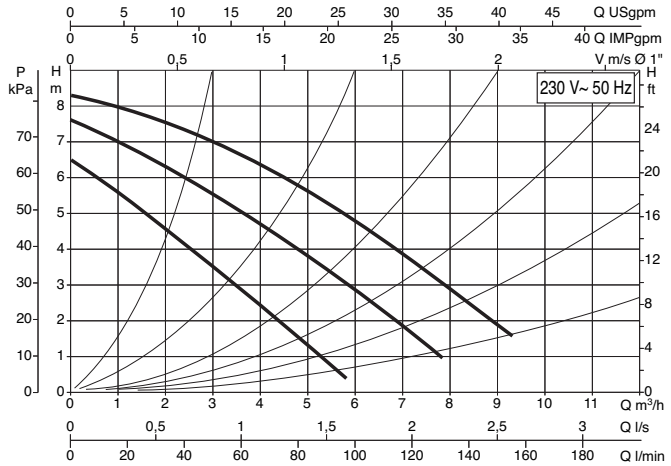
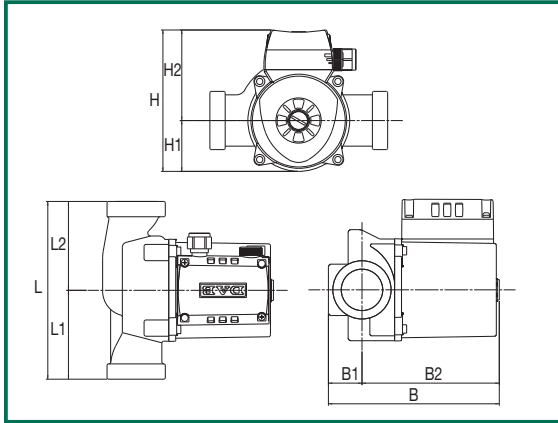
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equivalent to 1000 kg/m<sup>3</sup>. Tolerance of curves to ISO 9906.

# CIRCULATORS FOR HEATING AND AIR CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C  
 Maximum working pressure: 10 bar (1000 kPa)

## A 80/180 XM

SINGLE WITH UNIONS - SINGLE-PHASE

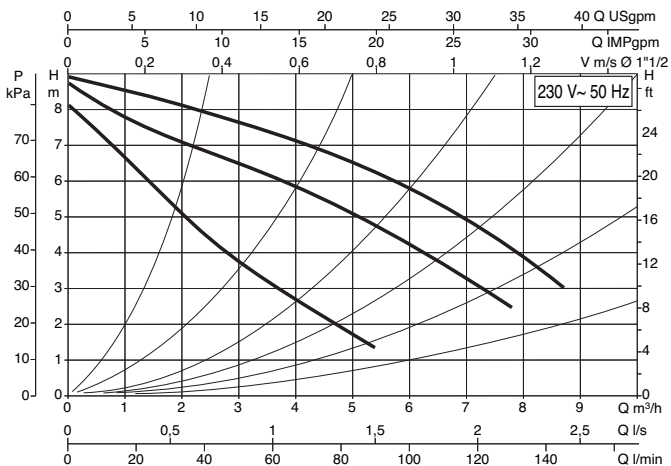
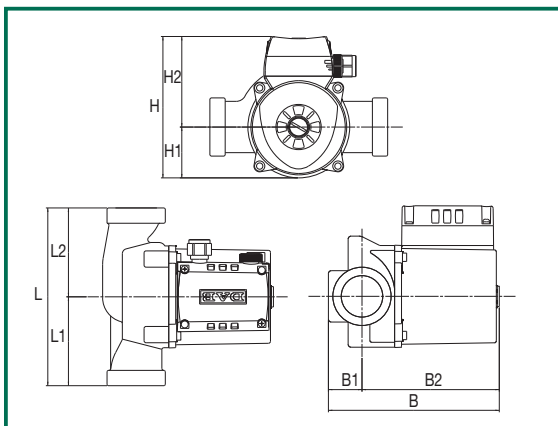


L	L1	L2	B	B1	B2	H	H1	H2	F	PACK DIMENSIONS			VOLUME	WEIGHT
										L	B	H	m <sup>3</sup>	Kg
180	90	90	173	34	139	143	52	92	2" G	206	170	180	0,066	5,2

MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA						MINIMUM SUCTION PRESSURE
				SPEED	rpm	P1 MAX W	In A	CAPACITOR		
								µF	Vc	
A 80/180 XM	1x230 V~	180	1" 1/4	3	2683	256	1,12	7	400	t° +90°C m.c.a. 2,5
				2	2374	260	1,17			
				1	1688	218	1,00			

## A 80/180 M

SINGLE WITH UNIONS - SINGLE-PHASE



L	L1	L2	B	B1	B2	H	H1	H2	F	PACK DIMENSIONS			VOLUME	WEIGHT
										L	B	H	m <sup>3</sup>	Kg
180	90	90	173	34	139	143	52	92	1" 1/2	206	170	180	0,066	5,3

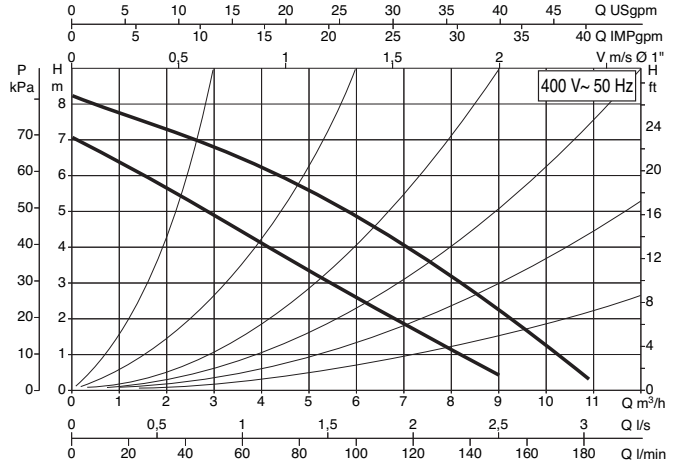
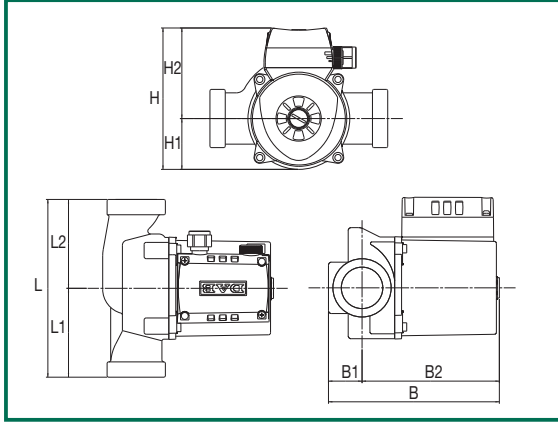
MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA						MINIMUM SUCTION PRESSURE
				SPEED	rpm	P1 MAX W	In A	CAPACITOR		
								µF	Vc	
A 80/180 M	1x230 V~	180	1"	3	2674	264	1,15	7	400	t° +90°C m.c.a. 2,5
				2	2356	262	1,20			
				1	1615	223	1,00			

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equivalent to 1000 kg/m<sup>3</sup>. Tolerance of curves to ISO 9906.

# CIRCULATORS FOR HEATING AND AIR CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C  
 Maximum working pressure: 10 bar (1000 kPa)

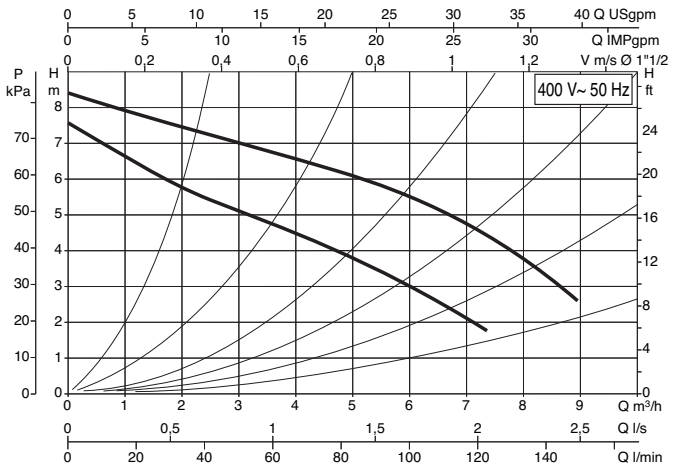
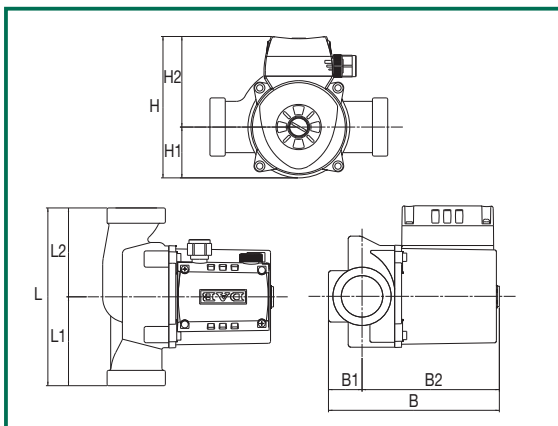
## A 80/180 XT SINGLE WITH UNIONS - THREE-PHASE



L	L1	L2	B	B1	B2	H	H1	H2	F	PACK DIMENSIONS			VOLUME	WEIGHT
										L	B	H	m <sup>3</sup>	Kg
180	90	90	173	34	139	143	52	92	2" G	206	170	180	0,066	5,3

MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA						MINIMUM SUCTION PRESSURE
				SPEED	rpm	P1 MAX W	In A	CAPACITOR		
				μF	Vc					
<b>A 80/180 XT</b>	3x400 V ~	180	1" 1/4	2	2727	272	0,57	-	-	t° +90°C m.c.a. 2,5
				1	2227	186	0,30	-	-	

## A 80/180 T SINGLE WITH UNIONS - THREE-PHASE



L	L1	L2	B	B1	B2	H	H1	H2	F	PACK DIMENSIONS			VOLUME	WEIGHT
										L	B	H	m <sup>3</sup>	Kg
180	90	90	173	34	139	143	52	92	1" 1/2	206	170	180	0,066	5,3

MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA						MINIMUM SUCTION PRESSURE
				SPEED	rpm	P1 MAX W	In A	CAPACITOR		
				μF	Vc					
<b>A 80/180 T</b>	3x400 V ~	180	1"	2	2724	271	0,57	-	-	t° +90°C m.c.a. 2,5
				1	2226	187	0,31	-	-	



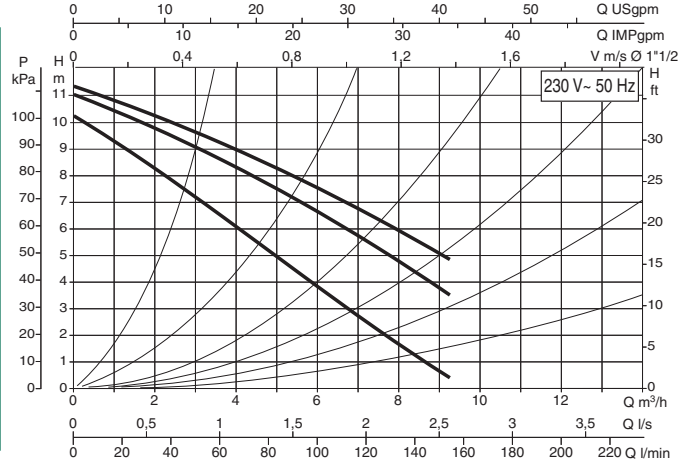
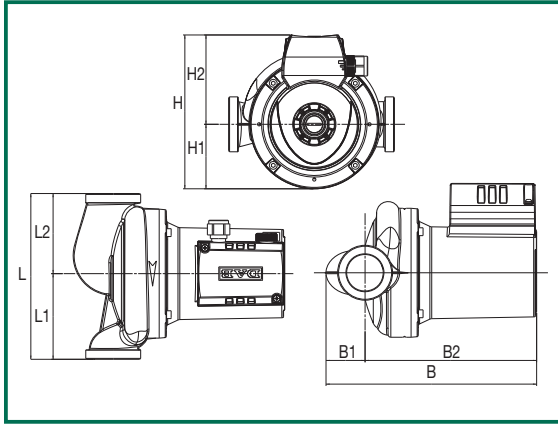
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equivalent to 1000 kg/m<sup>3</sup>. Tolerance of curves to ISO 9906.

# CIRCULATORS FOR HEATING AND AIR CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C  
 Maximum working pressure: 10 bar (1000 kPa)

## A 110/180 M

SINGLE WITH UNIONS - SINGLE-PHASE

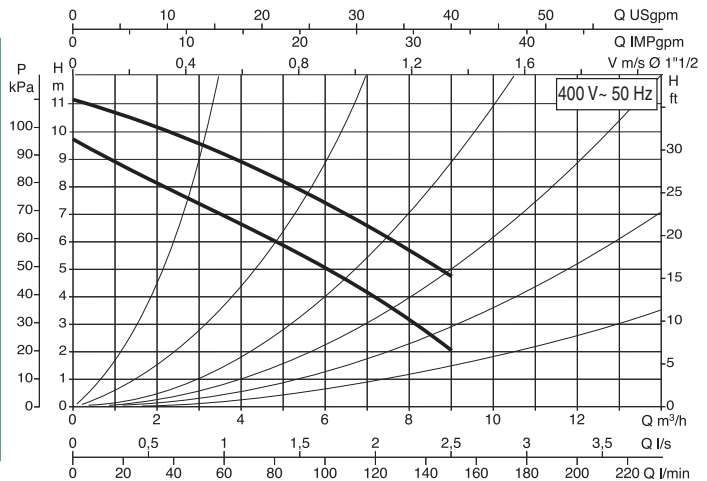
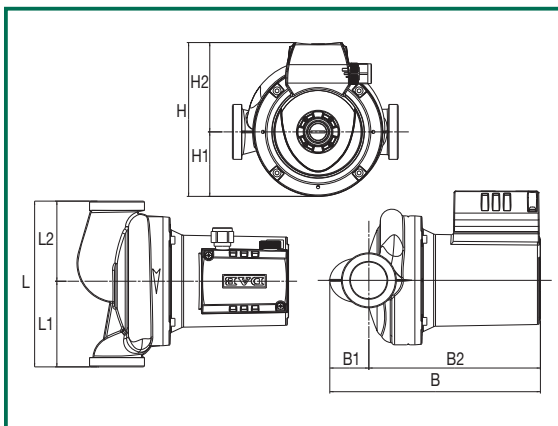


L	L1	L2	B	B1	B2	H	H1	H2	F	PACK DIMENSIONS			VOLUME	WEIGHT
										L	B	H	m <sup>3</sup>	Kg
180	93	87	229	42	186	167	70	97	1 1/2" G	237	200	272	0,066	5,3

MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA						MINIMUM SUCTION PRESSURE
				SPEED	rpm	P1 MAX W	In A	CAPACITOR		
				μF	Vc					
A 110/180 M	1x230 V ~	180	2" G	3	2746	410	1,6	12	450	t° +90°C m.c.a. 2,5
				2	2552	393	1,8			
				1	2052	361	1,7			

## A 110/180 T

SINGLE WITH UNIONS - THREE-PHASE



L	L1	L2	B	B1	B2	H	H1	H2	F	PACK DIMENSIONS			VOLUME	WEIGHT
										L	B	H	m <sup>3</sup>	Kg
180	93	87	229	186	42	163	70	93	1 1/2" G	237	200	272	0,066	5,2

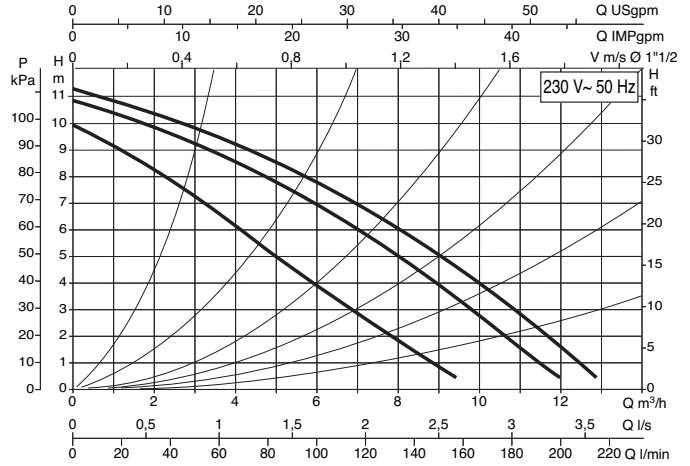
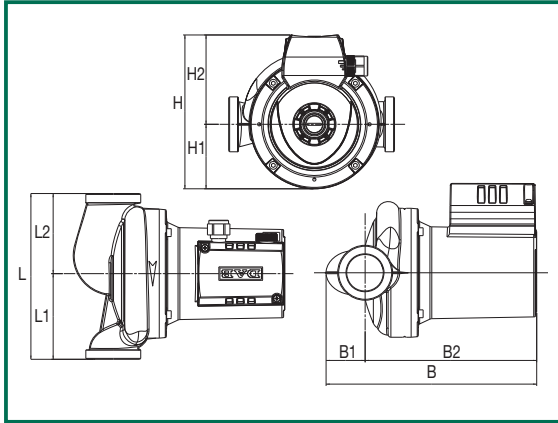
MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA						MINIMUM SUCTION PRESSURE
				SPEED	rpm	P1 MAX W	In A	CAPACITOR		
				μF	Vc					
A 110/180 T	3x400 V ~	180	2" G	2	2753	402	0,87	-	-	t° +90°C m.c.a. 2,5
				1	2338	286	0,48			

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equivalent to 1000 kg/m<sup>3</sup>. Tolerance of curves to ISO 9906.

# CIRCULATORS FOR HEATING AND AIR CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C  
 Maximum working pressure: 10 bar (1000 kPa)

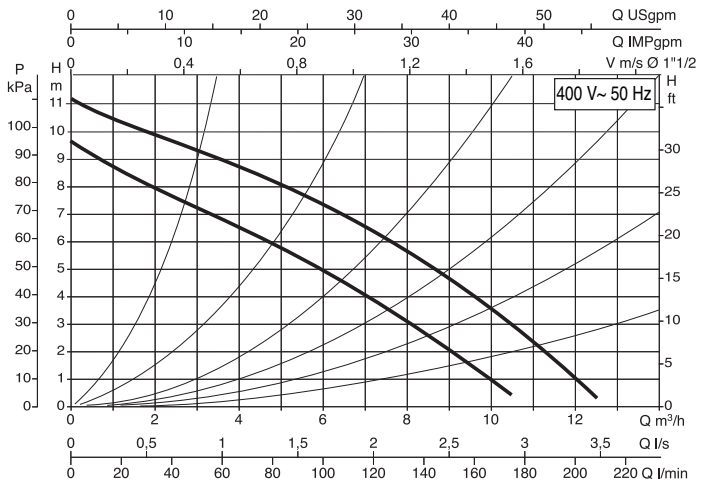
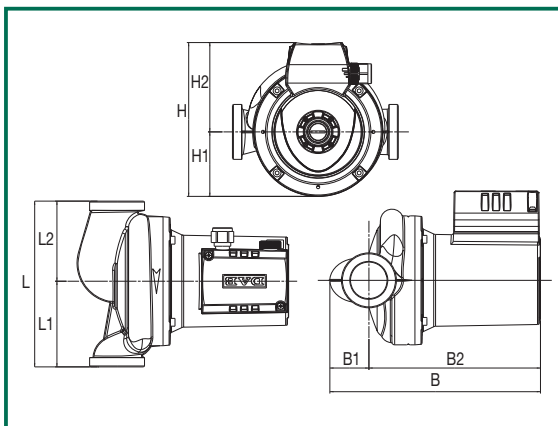
## A 110/180 XM SINGLE WITH UNIONS - SINGLE-PHASE



L	L1	L2	B	B1	B2	H	H1	H2	F	PACK DIMENSIONS			VOLUME	WEIGHT
										L	B	H	m <sup>3</sup>	Kg
180	93	87	229	42	186	167	70	97	2" G	237	200	272	0,066	5,3

MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA						MINIMUM SUCTION PRESSURE
				SPEED	rpm	P1 MAX W	In A	CAPACITOR µF Vc		
A 110/180 XM	1x230 V ~	180	1" 1/4	3	2746	410	1,7	12	450	t° +90°C m.c.a. 2,5
				2	2552	393	1,8			
				1	2052	361	1,6			

## A 110/180 XT SINGLE WITH UNIONS - THREE-PHASE



L	L1	L2	B	B1	B2	H	H1	H2	F	PACK DIMENSIONS			VOLUME	WEIGHT
										L	B	H	m <sup>3</sup>	Kg
180	93	87	229	186	42	163	70	93	2" G	237	200	272	0,066	5,2

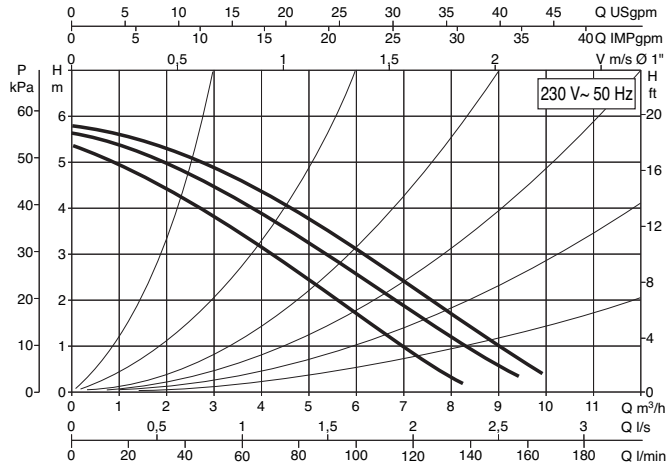
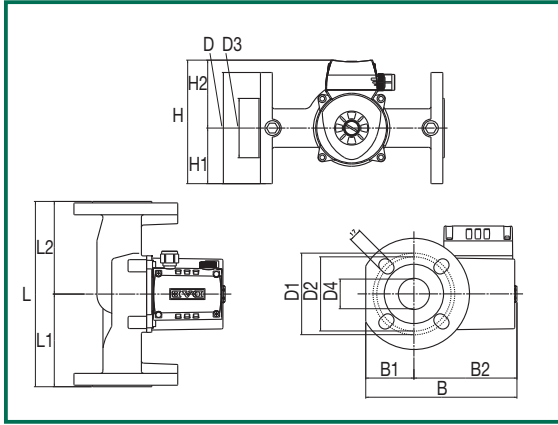
MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA						MINIMUM SUCTION PRESSURE
				SPEED	rpm	P1 MAX W	In A	CAPACITOR µF Vc		
A 110/180 XT	3x400 V ~	180	2" G	2	2759	403	0,90	-	-	t° +90°C m.c.a. 2,5
				1	2341	289	0,48			

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equivalent to 1000 kg/m<sup>3</sup>. Tolerance of curves to ISO 9906.

# CIRCULATORS FOR HEATING AND AIR CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C  
 Maximum working pressure: 10 bar (1000 kPa)

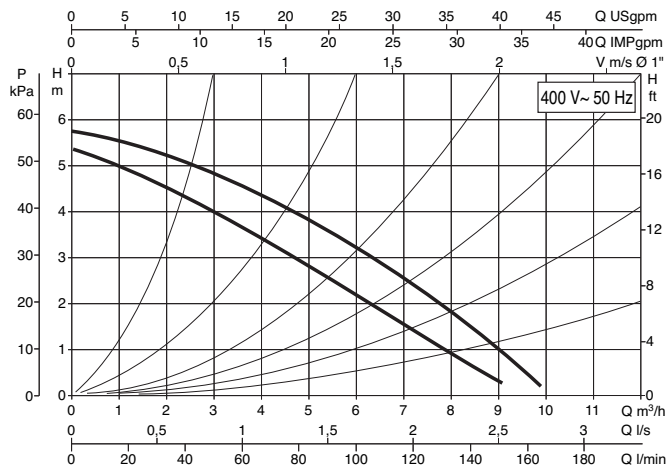
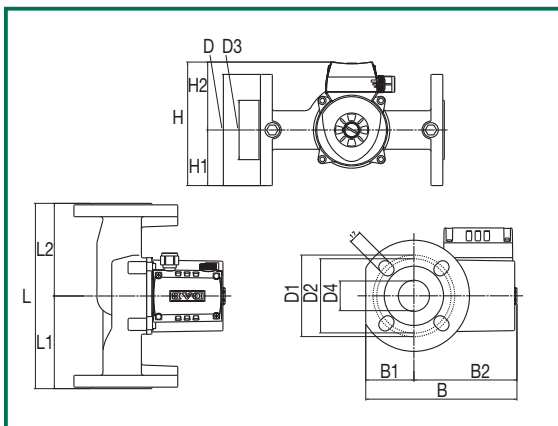
## B 50/250.40 M SINGLE FLANGED - SINGLE-PHASE



L	L1	L2	B	B1	B2	D	D1	D2	D3	D4	H	H1	H2	F	PACK DIMENSIONS			VOLUME	WEIGHT
															L	B	H	m <sup>3</sup>	Kg
250	125	125	204	65	139	150	110	100	80	40	167	75	92	DN40/PN10	302	202	283	0,013	9,1

MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA						MINIMUM SUCTION PRESSURE				
				SPEED	rpm	P1 MAX W	In A	CAPACITOR						
				μF	Vc									
<b>B 50/250.40 M</b>	1x230 V ~	250	DN 40	3	2766	195	0,95	4	400	t° +90°C m.c.a. 1,5				
				2	2616	194	0,95							
				1	2215	180	0,85							

## B 50/250.40 T SINGLE FLANGED - THREE-PHASE



L	L1	L2	B	B1	B2	D	D1	D2	D3	D4	H	H1	H2	F	PACK DIMENSIONS			VOLUME	WEIGHT
															L	B	H	m <sup>3</sup>	Kg
250	125	125	204	65	139	150	110	100	80	40	167	75	92	DN40/PN10	302	202	283	0,013	9,3

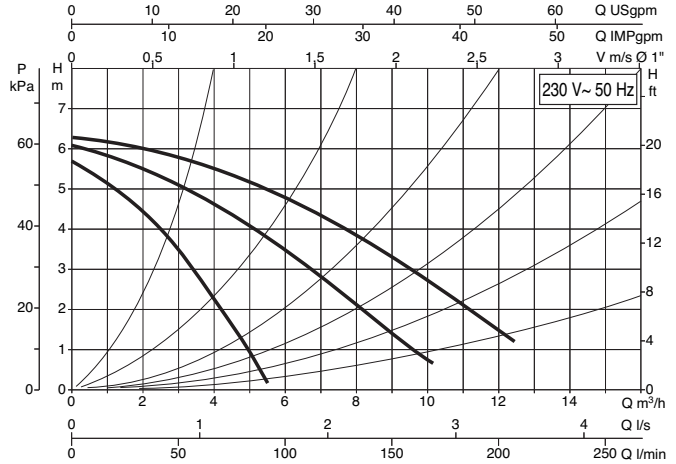
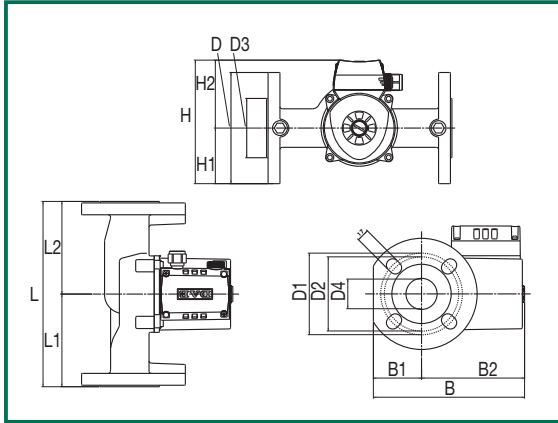
MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA						MINIMUM SUCTION PRESSURE				
				SPEED	rpm	P1 MAX W	In A	CAPACITOR						
				μF	Vc									
<b>B 50/250.40 T</b>	3x400 V ~	250	DN 40	2	2838	201	0,5	-	-	t° +90°C m.c.a. 1,5				
				1	2520	129	0,23							

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equivalent to 1000 kg/m<sup>3</sup>. Tolerance of curves to ISO 9906.

# CIRCULATORS FOR HEATING AND AIR CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C  
 Maximum working pressure: 10 bar (1000 kPa)

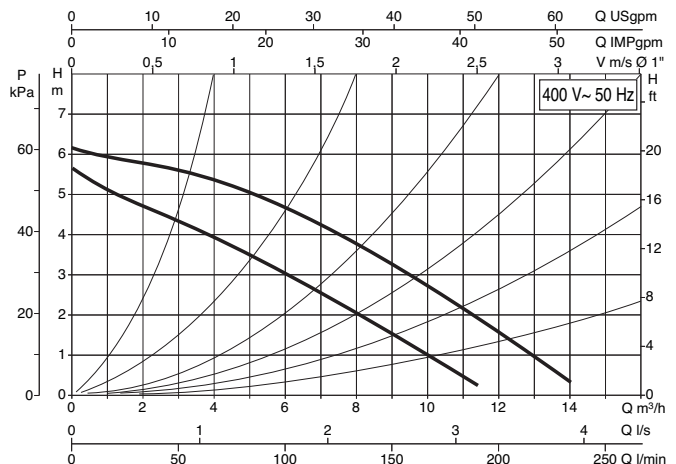
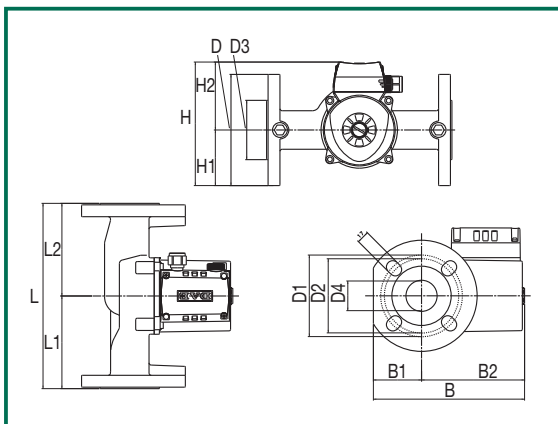
## B 56/250.40 M SINGLE FLANGED - SINGLE-PHASE



L	L1	L2	B	B1	B2	D	D1	D2	D3	D4	H	H1	H2	F	PACK DIMENSIONS			VOLUME	WEIGHT
															L	B	H	m <sup>3</sup>	Kg
250	125	125	204	65	139	150	110	100	80	40	167	75	92	DN40/PN10	302	202	283	0,013	9,3

MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA						MINIMUM SUCTION PRESSURE
				SPEED	rpm	P1 MAX W	In A	CAPACITOR		
				μF	Vc					
<b>B 56/250.40 M</b>	1x230 V ~	250	DN 40	3	2658	271	1,18	7	400	t° +90°C m.c.a. 1,5
				2	2117	294	1,32			
				1	1394	224	1			

## B 56/250.40 T SINGLE FLANGED - THREE-PHASE



L	L1	L2	B	B1	B2	D	D1	D2	D3	D4	H	H1	H2	F	PACK DIMENSIONS			VOLUME	WEIGHT
															L	B	H	m <sup>3</sup>	Kg
250	125	125	204	65	139	150	110	100	80	40	167	75	92	DN40/PN10	302	202	283	0,013	9,2

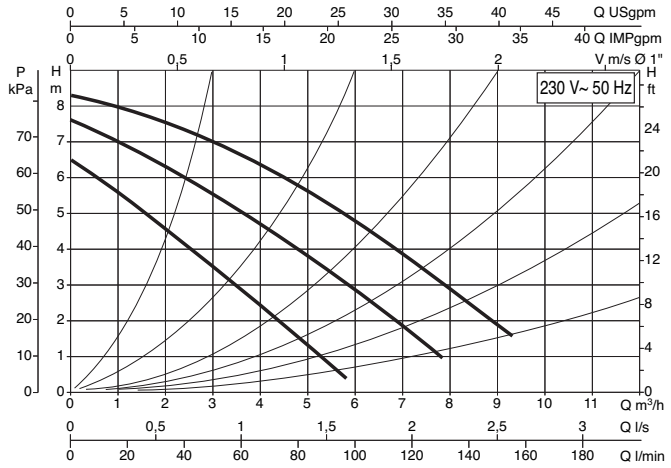
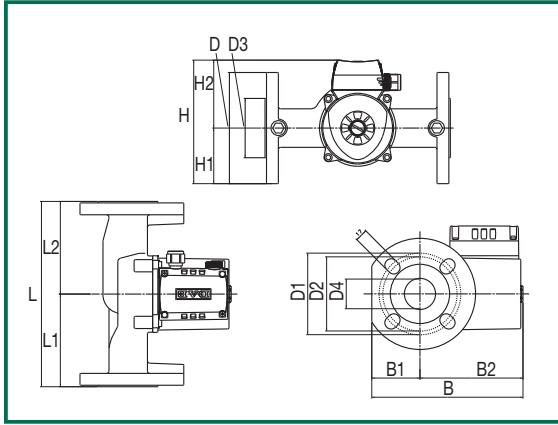
MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA						MINIMUM SUCTION PRESSURE
				SPEED	rpm	P1 MAX W	In A	CAPACITOR		
				μF	Vc					
<b>B 56/250.40 T</b>	3x400 V ~	250	DN 40	2	2708	291	0,6	-	-	t° +90°C m.c.a. 1,5
				1	2178	200	0,32			

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equivalent to 1000 kg/m<sup>3</sup>. Tolerance of curves to ISO 9906.

# CIRCULATORS FOR HEATING AND AIR CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C  
 Maximum working pressure: 10 bar (1000 kPa)

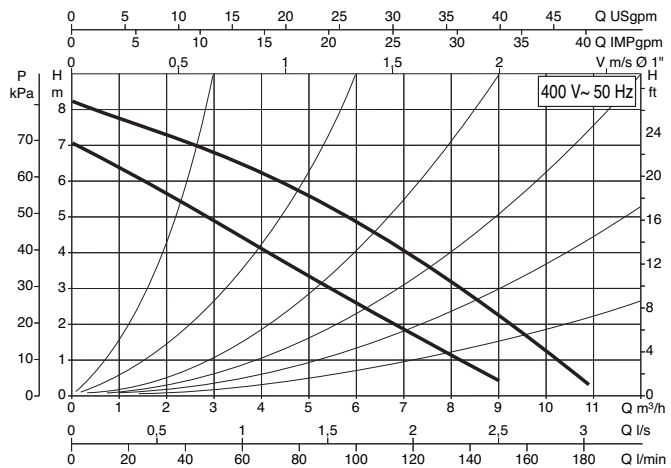
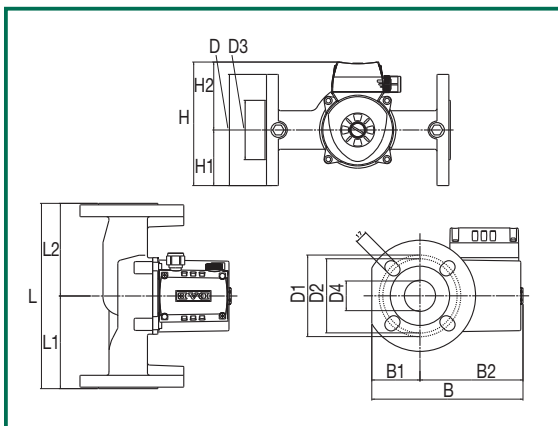
## B 80/250.40 M SINGLE FLANGED - SINGLE-PHASE



L	L1	L2	B	B1	B2	D	D1	D2	D3	D4	H	H1	H2	F	PACK DIMENSIONS			VOLUME	WEIGHT
															L	B	H	m <sup>3</sup>	Kg
250	125	125	204	65	139	150	110	100	80	40	167	75	92	DN40/PN10	302	202	283	0,013	9,3

MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA						MINIMUM SUCTION PRESSURE
				SPEED	rpm	P1 MAX W	In A	CAPACITOR		
				μF	Vc					
<b>B 80/250.40 M</b>	1x230 V ~	250	DN 40	3	2683	256	1,12	7	400	t° +90°C m.c.a. 2,5
				2	2374	260	1,17			
				1	1688	218	1,00			

## B 80/250.40 T SINGLE FLANGED - THREE-PHASE



L	L1	L2	B	B1	B2	D	D1	D2	D3	D4	H	H1	H2	F	PACK DIMENSIONS			VOLUME	WEIGHT
															L	B	H	m <sup>3</sup>	Kg
250	125	125	204	65	139	150	110	100	80	40	167	75	92	DN40/PN10	302	202	283	0,013	9,3

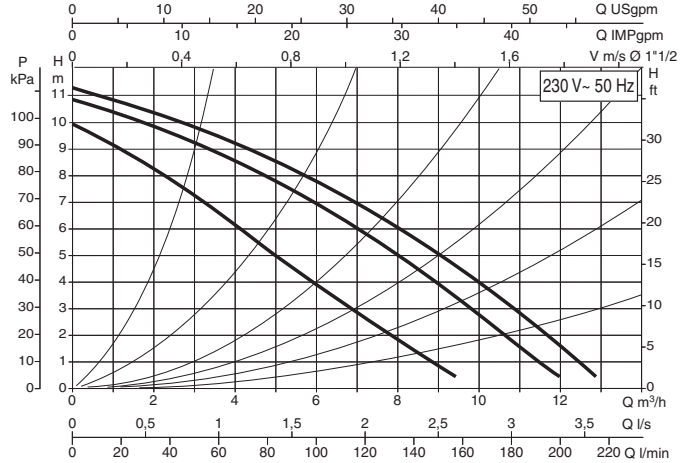
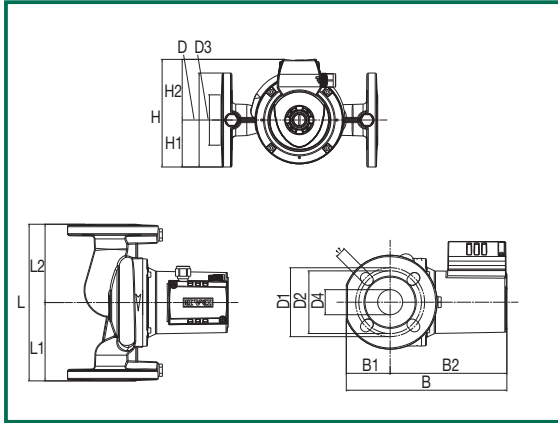
MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA						MINIMUM SUCTION PRESSURE
				SPEED	rpm	P1 MAX W	In A	CAPACITOR		
				μF	Vc					
<b>B 80/250.40 T</b>	3x400 V ~	250	DN 40	2	2724	271	0,57	-	-	t° +90°C m.c.a. 2,5
				1	2226	187	0,31			

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equivalent to 1000 kg/m<sup>3</sup>. Tolerance of curves to ISO 9906.

# CIRCULATORS FOR HEATING AND AIR CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C  
 Maximum working pressure: 10 bar (1000 kPa)

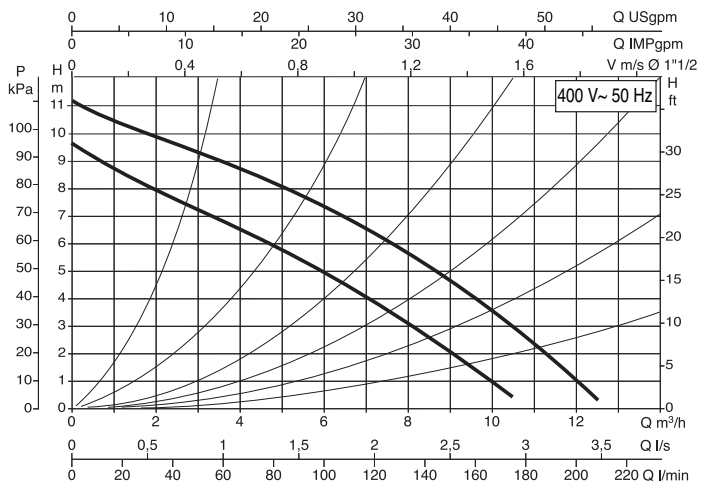
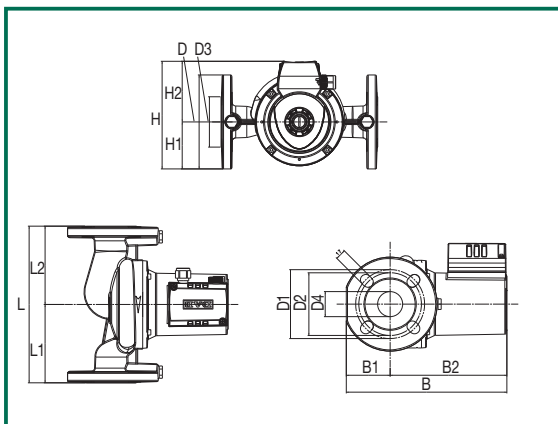
## B 110/250.40 M SINGLE FLANGED - SINGLE-PHASE



L	L1	L2	B	B1	B2	D	D1	D2	D3	D4	H	H1	H2	F	PACK DIMENSIONS			VOLUME	WEIGHT
															L	B	H	m <sup>3</sup>	Kg
250	125	125	256	70	186	150	110	100	80	40	172	75	97	DN40/PN10	302	202	283	0,013	9,2

MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA				MINIMUM SUCTION PRESSURE		
				SPEED	rpm	P1 MAX W	In A			CAPACITOR µF
<b>B 110/250.40 M</b>	1x230 V ~	250	DN 40	3	2746	410	1,77	12	450	t° +90°C m.c.a. 2,5
				2	2552	393	1,78			
				1	2052	361	1,64			

## B 110/250.40 T SINGLE FLANGED - THREE-PHASE



L	L1	L2	B	B1	B2	D	D1	D2	D3	D4	H	H1	H2	F	PACK DIMENSIONS			VOLUME	WEIGHT
															L	B	H	m <sup>3</sup>	Kg
250	125	125	256	70	186	150	110	100	80	40	168	75	93	DN40/PN10	302	202	283	0,013	9,3

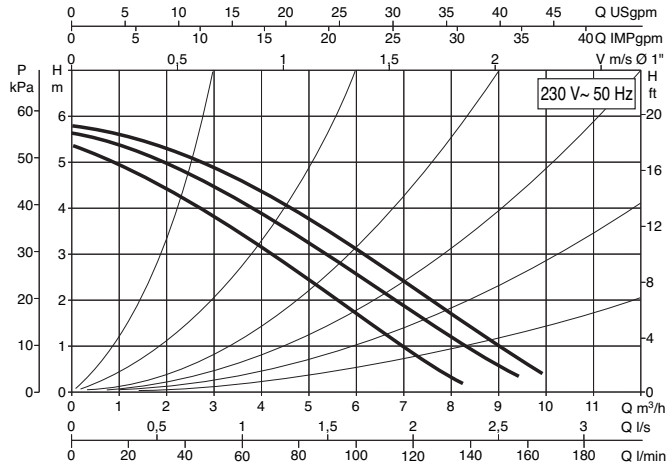
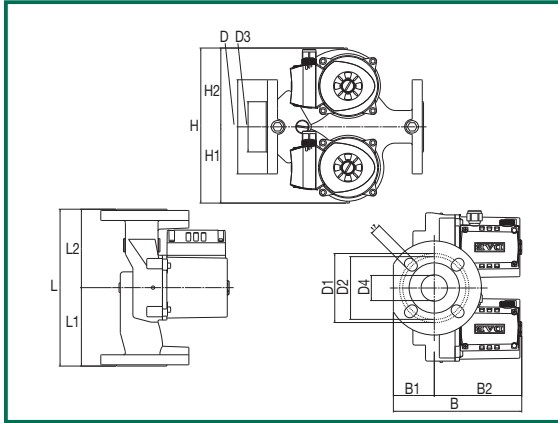
MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA				MINIMUM SUCTION PRESSURE		
				SPEED	rpm	P1 MAX W	In A			CAPACITOR µF
<b>B 110/250.40 T</b>	3x400 V ~	250	DN 40	2	2759	403	0,90	-	-	t° +90°C m.c.a. 2,5
				1	2341	289	0,48			

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equivalent to 1000 kg/m<sup>3</sup>. Tolerance of curves to ISO 9906.

# CIRCULATORS FOR HEATING AND AIR CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C  
 Maximum working pressure: 10 bar (1000 kPa)

## D 50/250.40 M TWIN FLANGED - SINGLE-PHASE

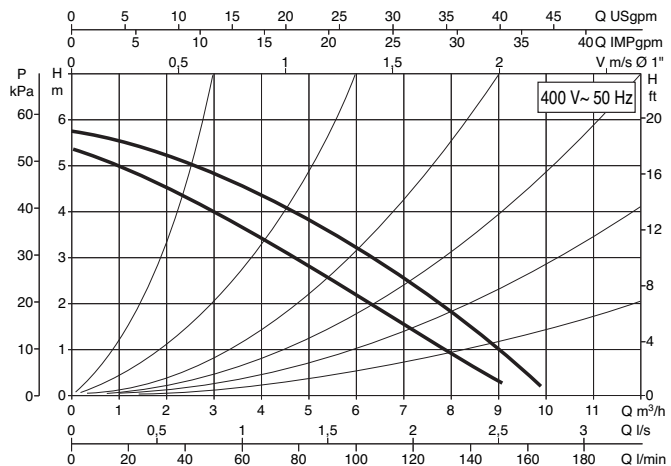
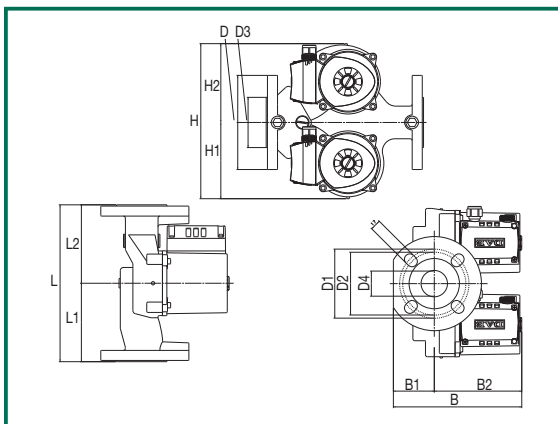


L	L1	L2	B	B1	B2	D	D1	D2	D3	D4	H	H1	H2	F	PACK DIMENSIONS			VOLUME	WEIGHT
															L	B	H	m <sup>3</sup>	Kg
250	125	125	204	65	139	150	110	100	80	40	247	122	126	DN40/PN10	355	298	283	0,018	15,3

MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA*						MINIMUM SUCTION PRESSURE
				SPEED	rpm	P1 MAX W	I <sub>n</sub> A	CAPACITOR		
				μF	V <sub>c</sub>					
<b>D 50/250.40 M</b>	1x230 V ~	250	DN 40 - PN 10	3	2766	195	0,95	4	400	t° +90°C m.c.a. 1,5
				2	2616	194	0,95			
				1	2215	180	0,85			

\* Electrical and hydraulic data refer to operation of just one motor.

## D 50/250.40 T TWIN FLANGED - THREE-PHASE



L	L1	L2	B	B1	B2	D	D1	D2	D3	D4	H	H1	H2	F	PACK DIMENSIONS			VOLUME	WEIGHT
															L	B	H	m <sup>3</sup>	Kg
250	125	125	204	65	139	150	110	100	80	40	247	122	126	DN40/PN10	355	298	283	0,018	15,8

MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA*						MINIMUM SUCTION PRESSURE
				SPEED	rpm	P1 MAX W	I <sub>n</sub> A	CAPACITOR		
				μF	V <sub>c</sub>					
<b>D 50/250.40 T</b>	3x400 V ~	250	DN 40 - PN 10	2	2838	201	0,50	-	-	t° +90°C m.c.a. 1,5
				1	2520	129	0,23			

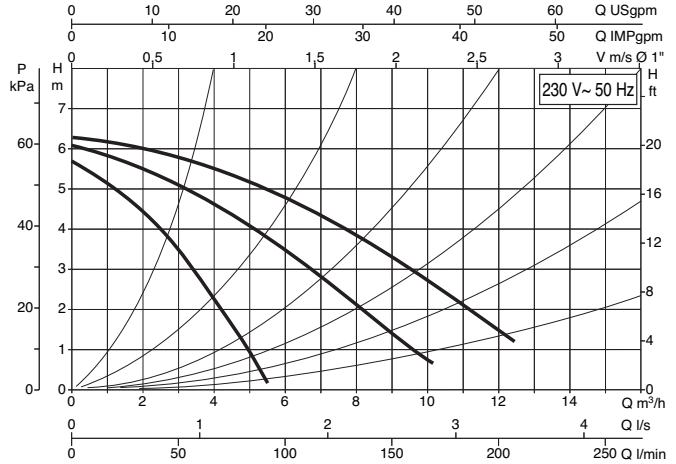
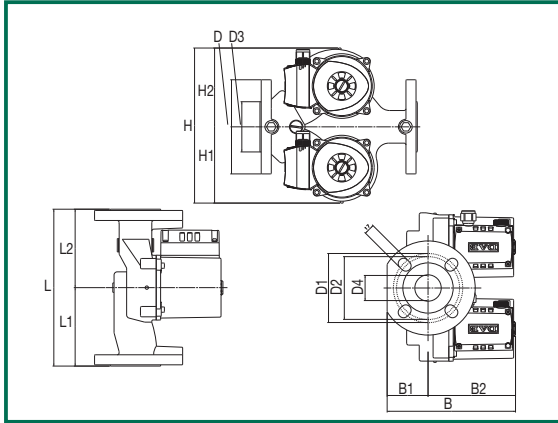
\* Electrical and hydraulic data refer to operation of just one motor.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equivalent to 1000 kg/m<sup>3</sup>. Tolerance of curves to ISO 9906.

# CIRCULATORS FOR HEATING AND AIR CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C  
 Maximum working pressure: 10 bar (1000 kPa)

## D 56/250.40 M TWIN FLANGED - SINGLE-PHASE

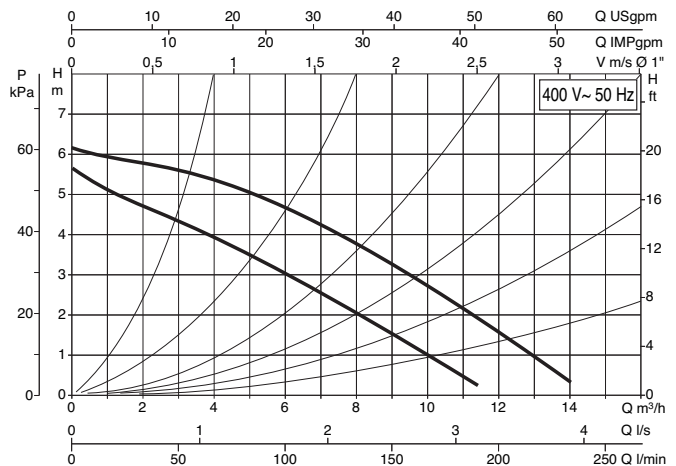
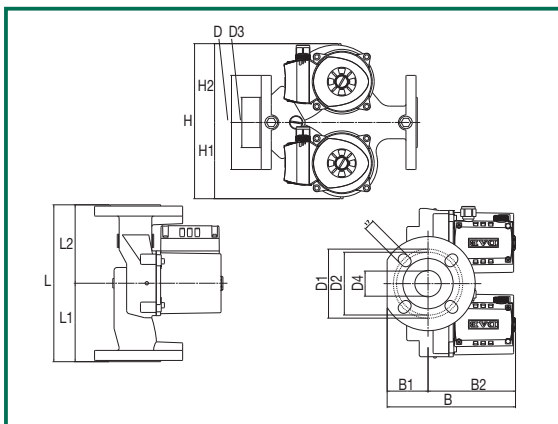


L	L1	L2	B	B1	B2	D	D1	D2	D3	D4	H	H1	H2	F	PACK DIMENSIONS			VOLUME	WEIGHT
															L	B	H	m <sup>3</sup>	Kg
250	125	125	204	65	139	150	110	100	80	40	247	122	126	DN40/PN10	355	298	283	0,018	15,8

MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA*						MINIMUM SUCTION PRESSURE
				SPEED	rpm	P1 MAX W	In A	CAPACITOR		
				μF	Vc					
<b>D 56/250.40 M</b>	1x230 V ~	250	DN 40 - PN 10	3	2658	271	1,18	7	400	t° +90°C m.c.a. 1,5
				2	2117	294	1,32			
				1	1394	224	1,00			

\* Electrical and hydraulic data refer to operation of just one motor.

## D 56/250.40 T TWIN FLANGED - THREE-PHASE



L	L1	L2	B	B1	B2	D	D1	D2	D3	D4	H	H1	H2	F	PACK DIMENSIONS			VOLUME	WEIGHT
															L	B	H	m <sup>3</sup>	Kg
250	125	125	204	65	139	150	110	100	80	40	247	122	126	DN40/PN10	355	298	283	0,018	15,4

MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA*						MINIMUM SUCTION PRESSURE
				SPEED	rpm	P1 MAX W	In A	CAPACITOR		
				μF	Vc					
<b>D 56/250.40 T</b>	3x400 V ~	250	DN 40 - PN 10	2	2708	291	0,60	-	-	t° +90°C m.c.a. 1,5
				1	2178	200	0,33			

\* Electrical and hydraulic data refer to operation of just one motor.

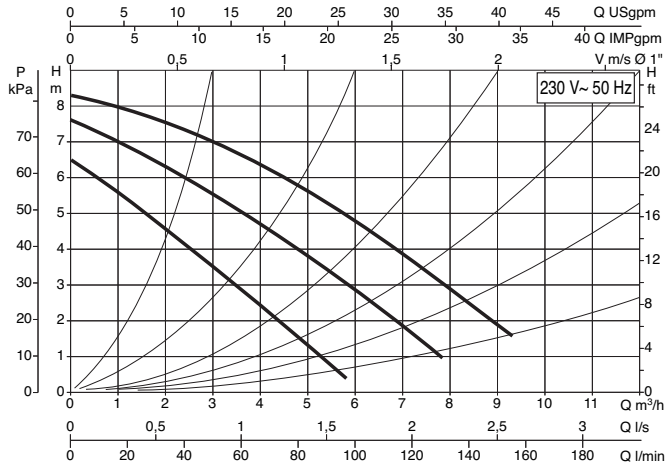
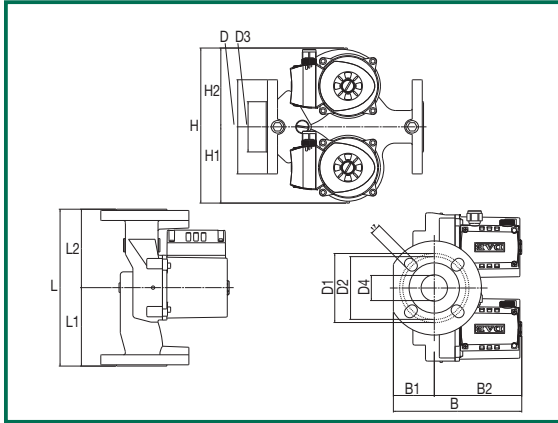


The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equivalent to 1000 kg/m<sup>3</sup>. Tolerance of curves to ISO 9906.

# CIRCULATORS FOR HEATING AND AIR CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C  
 Maximum working pressure: 10 bar (1000 kPa)

## D 80/250.40 M TWIN FLANGED - SINGLE-PHASE

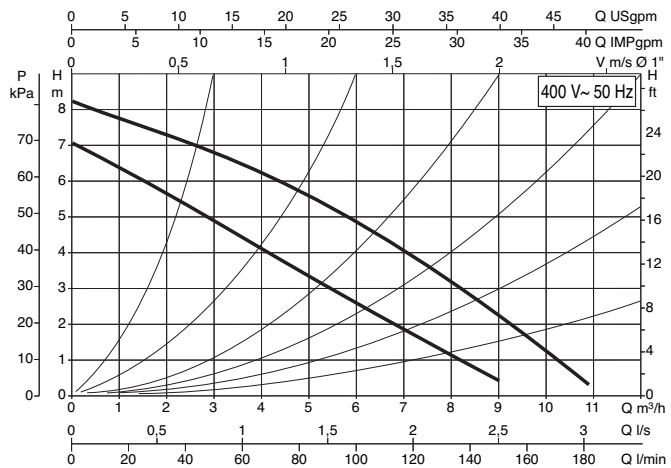
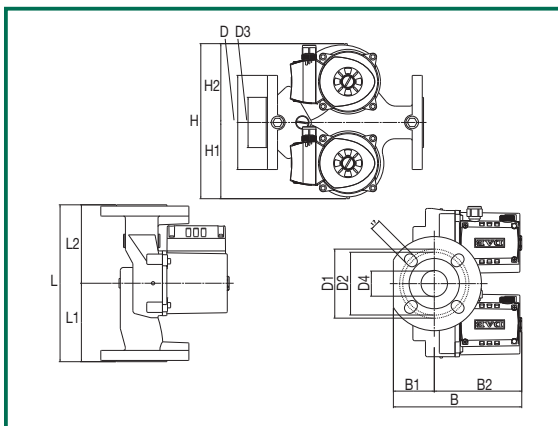


L	L1	L2	B	B1	B2	D	D1	D2	D3	D4	H	H1	H2	F	PACK DIMENSIONS			VOLUME	WEIGHT
															L	B	H	m <sup>3</sup>	Kg
250	125	125	204	65	139	150	110	100	80	40	247	122	126	DN40/PN10	355	298	283	0,018	15,8

MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA*						MINIMUM SUCTION PRESSURE
				SPEED	rpm	P1 MAX W	In A	CAPACITOR		
				μF	Vc					
<b>D 80/250.40 M</b>	1x230 V ~	250	DN 40 - PN 10	3	2683	256	1,12	7	400	t° +90°C m.c.a. 2,5
				2	2374	260	1,17			
				1	1688	218	1,00			

\* Electrical and hydraulic data refer to operation of just one motor.

## D 80/250.40 T TWIN FLANGED - THREE-PHASE



L	L1	L2	B	B1	B2	D	D1	D2	D3	D4	H	H1	H2	F	PACK DIMENSIONS			VOLUME	WEIGHT
															L	B	H	m <sup>3</sup>	Kg
250	125	125	204	65	139	150	110	100	80	40	247	122	126	DN40/PN10	355	298	283	0,018	15,8

MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA*						MINIMUM SUCTION PRESSURE
				SPEED	rpm	P1 MAX W	In A	CAPACITOR		
				μF	Vc					
<b>D 80/250.40 T</b>	3x400 V ~	250	DN 40 - PN 10	2	2724	271	0,57	-	-	t° +90°C m.c.a. 2,5
				1	2226	187	0,31			

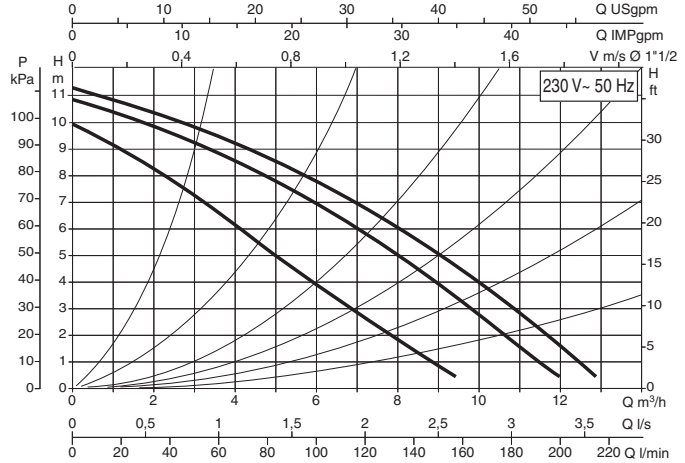
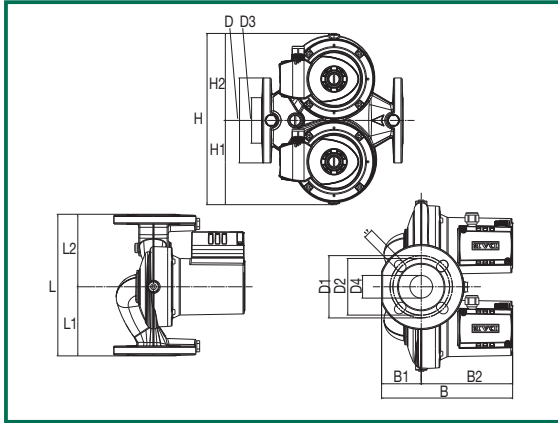
\* Electrical and hydraulic data refer to operation of just one motor.

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equivalent to 1000 kg/m<sup>3</sup>. Tolerance of curves to ISO 9906.

# CIRCULATORS FOR HEATING AND AIR CONDITIONING SYSTEMS

Liquid temperature range: from -10°C to +110°C  
 Maximum working pressure: 10 bar (1000 kPa)

## D 110/250.40 M TWIN FLANGED - SINGLE-PHASE

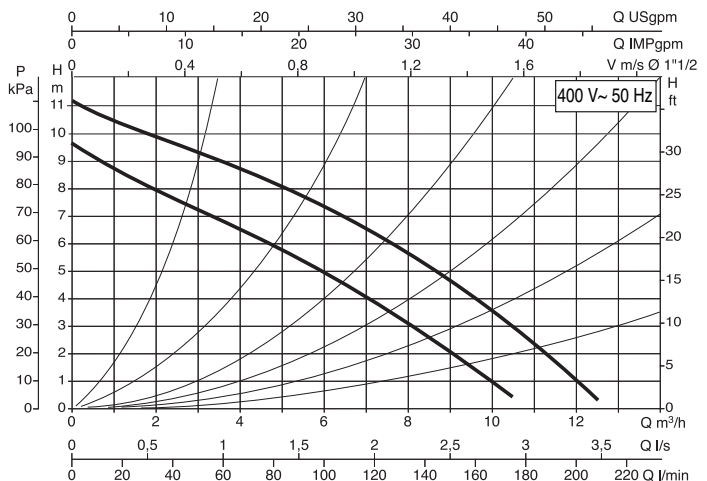
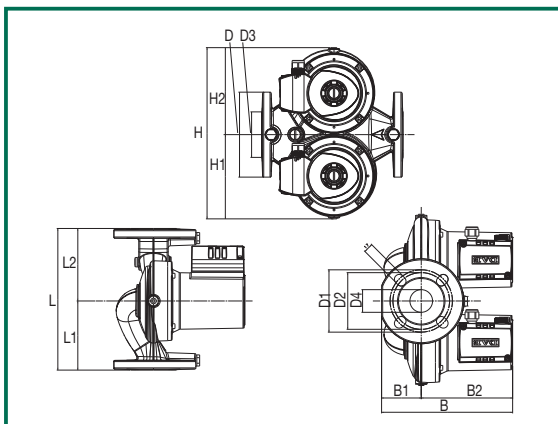


L	L1	L2	B	B1	B2	D	D1	D2	D3	D4	H	H1	H2	F	PACK DIMENSIONS			VOLUME	WEIGHT
															L	B	H	m <sup>3</sup>	Kg
250	122	128	231	70	161	150	110	100	80	40	302	149	154	DN40/PN10	355	298	283	0,018	16

MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA*						MINIMUM SUCTION PRESSURE
				SPEED	rpm	P1 MAX W	In A	CAPACITOR µF Vc		
D 110/250.40 M	1x230 V ~	250	DN 40 - PN 10	3	2746	410	1,77	12	450	t° +90°C m.c.a. 2,5
				2	2552	393	1,78			
				1	2052	361	1,64			

\* Electrical and hydraulic data refer to operation of just one motor.

## D 110/250.40 T TWIN FLANGED - THREE-PHASE



L	L1	L2	B	B1	B2	D	D1	D2	D3	D4	H	H1	H2	F	PACK DIMENSIONS			VOLUME	WEIGHT
															L	B	H	m <sup>3</sup>	Kg
250	122	128	231	70	161	150	110	100	80	40	302	149	154	DN40/PN10	355	298	283	0,018	15,8

MODEL	POWER SUPPLY 50 Hz	CENTRE DISTANCE mm	UNIONS ON REQUEST	ELECTRICAL DATA*						MINIMUM SUCTION PRESSURE
				SPEED	rpm	P1 MAX W	In A	CAPACITOR µF Vc		
D 110/250.40 T	3x400 V ~	250	DN 40 - PN 10	2	2759	403	0,90	-	-	t° +90°C m.c.a. 2,5
				1	2341	289	0,48			

\* Electrical and hydraulic data refer to operation of just one motor.