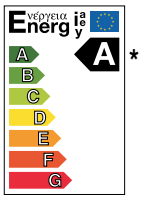
BPH-E / DPH-E

CIRCOLATORI ELETTRONICI



RISCALDAMENTO, CONDIZIONAMENTO, REFRIGERAZIONE

Le pompe elettroniche di circolazione **DIALOGUE** possono essere utilizzate in impianti di riscaldamento, ventilazione e condizionamento per edifici ad uso abitativo e commerciale quali:
-Grandi edifici abitativi -Condomini e palazzine
-Abitazioni -Cliniche ed ospedali -Scuole -Edifici adibiti per uffici -Beni immobiliari
Tutti i modelli sono disponibili sia in versione singola che gemellare.
I circolatori **BPH-E e DPH-E DIALOGUE** incorporano un dispositivo elettronico che permette una regolazione a pressione costante, una regolazione a pressione proporzionale (di conseguenza portata costante), il funzionamento a curva costante e a pressione differenziale costante in funzione della temperatura del liquido pompato. L'interfaccia utente è facile da utilizzare e di immediata comprensione.

Grado di protezione circolatore: IP 44.
Classe di isolamento: H.
Tensione di serie: monofase 230V, 50/60Hz.
Conformità a standard europeo:
EN 61800-3 - EN 60335-1 - EN 60335-2-51.
Campo di funzionamento: da 5 a 64 m^3/h con prevalenza fino a 18,2 metri.
Campo di temperatura del liquido: da -10°C a +120° C.
Liquido pompato: pulito, libero da sostanze solide e oli minerali, non viscoso, chimicamente neutro, prossimo alle caratteristiche dell'acqua (glicole max. 30%).
Massima pressione di esercizio: 10 bar (1000 kPa).
Flangiatura di serie: DN 40, DN 50, DN 65, DN 80 in PN 6 / PN 10 (4 asole).
Installazione: con l'ASSE MOTORE ORIZZONTALE.
Flangiatura a richiesta: DN 80 in PN 10 / PN 16 (8 fori).

BPH-E **DIALOGUE**

DPH-E **DIALOGUE**

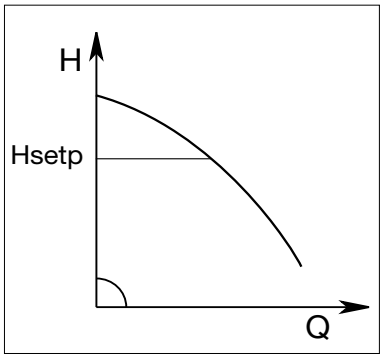
* vedi dati tecnici

MODI DI FUNZIONAMENTO

Tutte funzionalità a seguito elencate sono consultabili da tutti gli utenti (anche i meno qualificati) semplicemente scorrendo il menù Dialogue.
La taratura e la modifica dei parametri è protetta e riservata solo ad un'utenza esperta.

1 - Modo di regolazione a pressione differenziale costante ΔP-c

La modalità di regolazione ΔP-c mantiene costante la pressione differenziale dell'impianto al valore di impostabile H setp al variare della portata.



Questa regolazione è particolarmente indicata nei seguenti impianti:

a. Impianti di riscaldamento a due tubi con valvole termostatiche e con:
- prevalenza inferiore a 2 metri;
- circolazione naturale;
- basse perdite di carico in quelle parti dell'impianto dove scorre la quantità totale del flusso d'acqua;
- elevata temperatura differenziale (riscaldamento centralizzato).

b. Impianti di riscaldamento a pavimento con valvole termostatiche

c. Impianti di riscaldamento mono-tubo con valvole termostatiche e valvole di taratura

d. Impianti con pompe di circuiti primari con basse perdite di carico

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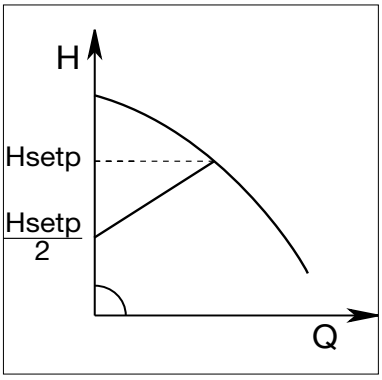
BPH-E / DPH-E
CIRCOLATORI ELETTRONICI

2 - Modo di regolazione a pressione differenziale proporzionale *ΔP-v*

La modalità di regolazione ΔP-v al variare della portata, varia linearmente il valore di consegna della prevalenza da Hsetp ad Hsetp/2.



Questa regolazione è particolarmente indicata nei seguenti impianti:

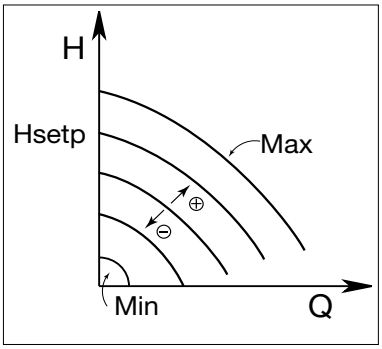
a. Impianti di riscaldamento a due tubi con valvole termostatiche e con:
- prevalenza inferiore a 2 metri;
- circolazione naturale;
- basse perdite di carico in quelle parti dell'impianto dove scorre la quantità totale del flusso d'acqua;
- elevata temperatura differenziale (riscaldamento centralizzato).

b. Impianti di riscaldamento a pavimento con valvole termostatiche

c. Impianti di riscaldamento mono-tubo con valvole termostatiche e valvole di taratura

d. Impianti con pompe di circuiti primari con basse perdite di carico

3 - Modalità di regolazione a curva costante

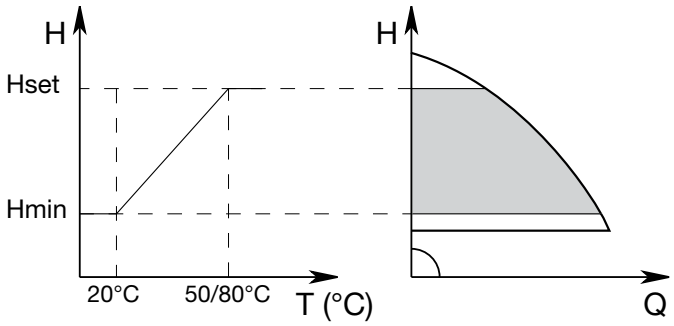


La regolazione a velocità costante disattiva la regolazione del modulo elettronico. La velocità della pompa può essere regolata manualmente ad un valore costante agendo direttamente sul pannello frontale o con comando remoto tramite un segnale 0-10V dove:

V<= 3 Volt la velocità di rotazione è 846 rpm (velocità min)
V = 10 Volt la velocità di rotazione è 2820 rpm (velocità max)
Per V compreso tra 3 e 10 Volt interpolazione lineare della velocità

Questo tipo di regolazione è particolarmente indicato nella sostituzione di circolatori in impianti già esistenti.

4 - Modalità di regolazione a pressione differenziale costante e proporzionale in funzione della temperatura dell'acqua



Il Setpoint relativo alla prevalenza del circolatore viene ridotto in funzione della temperatura dell'acqua.

La temperatura del liquido può essere impostata a 80°C o a 50°C.

Questa regolazione è particolarmente indicata nei seguenti impianti:
a.- negli impianti a portata variabile (impianti di riscaldamento a due tubi), dove viene assicurata un' ulteriore riduzione delle prestazioni del circolatore in funzione dell'abbassamento della temperatura del liquido circolante , quando vi è una minore richiesta di riscaldamento.
b.- negli impianti a portata costante (impianti di riscaldamento mono-tubo e a pavimento), dove le prestazioni del circolatore possono essere regolate solo attivando la funzione di influenza della temperatura.
Viene impostata per mezzo del pannello di controllo **DIALOGUE**

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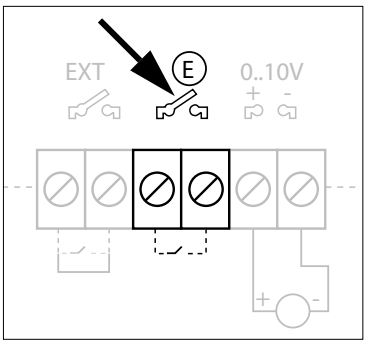
FUNZIONE ECONOMY



La funzione ecomony può essere impostata agendo direttamente sul pannello di comando fissando un valore di riduzione (f.rid) che potrà avere un valore massimo del 50%.
In tutte le impostazioni precedentemente elencate va sostituito il valore Hset ad un valore Hset x f.rid

GESTIONE ALLARMI

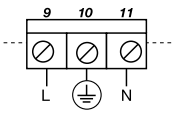
Il dispositivo **DIALOGUE** ha la possibilità di rilanciare a distanza gli allarmi intercorsi nella pompa stessa attraverso un contatto pulito (250Vac – 5 Amp). Tali allarmi verranno anche memorizzati nella memoria residente del **DIALOGUE** per consultazioni successive. Sarà inoltre possibile eliminare lo storico allarmi per effettuare test dedicati.

GESTIONE ALLARMI

Simbolo allarme	Tipo allarme	
	E01	Pompa bloccata
	E02	Errore interno V18
min	E03	Bassa tensione di rete (LP)
max	E04	Alta tensione di rete (HP)
max	E06	Surriscaldamento critico parti elettroniche
	W01	Segnale sensore assente
1 2	W02	Comunicazione gemellare assente
max	W03	Surriscaldamento parti elettroniche
	W04	Avaria sistemi di raffreddamento
Imax	W05	Protezione da sovracorrente

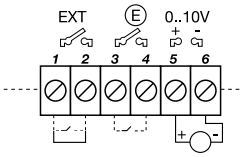
SCHEMA ELETTRICO

Schema morsettiera alimentazione



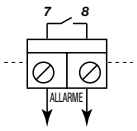
Morsetti di collegamento linea di alimentazione 1x230V 50-60Hz
9 = Linea
10 = Messa a terra
11 = Neutro

Schema morsettiera di servizio



Morsetti di collegamento per comando remoto
1 - 2 (exit)
Morsetti di collegamento per ingresso funzione economy
3 - 4 (E)
Morsetti di collegamento per ingresso analogico 0-10V dc
5 = + 10V 6 = 0 V

Schema morsettiera allarme



Morsetti di collegamento per contatto d'allarme a distanza 250V ac 5A
7 - 8 (alarm)

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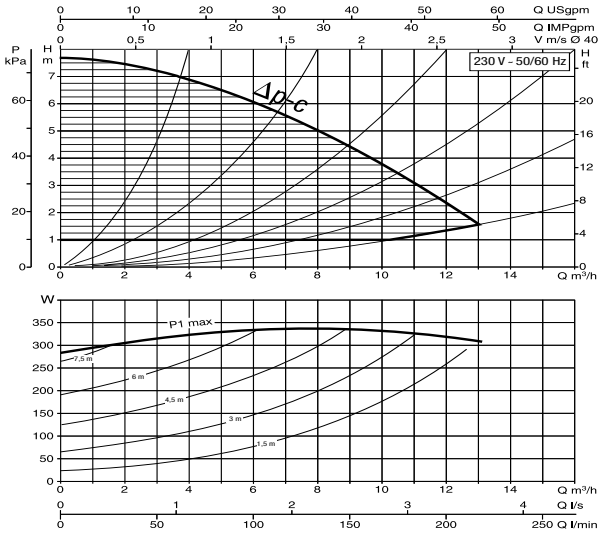
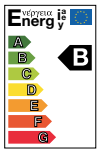
DATI TECNICI - SINGOLI FLANGIATI

MODELLO	CODICE	INTERASSE mm	DATI ELETTRICI				MINIMA PRESSIONE DI BATTENTE				
			ALIMENTAZIONE 50 Hz	P1 MAX W	In A	CONTROFLANGE SU RICHIESTA					
BPH-E 60/250.40 M	505904040	250	1x230 V	344	2	DN 40 - PN 10	t°	75°	90°	110°	120°
							m.t.	1,6	4	-	19
BPH-E 120/250.40 M	505907040	250	1x230 V	528	3	DN 40 - PN 10	t°	75°	90°	110°	120°
							m.t.	6	9	-	23
BPH-E 60/280.50 M	505924040	280	1x230 V	606	3,37	DN 50 - PN 10	t°	75°	90°	110°	120°
							m.t.	4	7,5	-	21
BPH-E 120/280.50 M	505927040	280	1x230 V	893	4,84	DN 50 - PN 10	t°	75°	90°	110°	120°
							m.t.	2	5	-	20
BPH-E 180/280.50 M	505929040	280	1x230 V	1693	9,2	DN 50 - PN 10	t°	75°	90°	110°	120°
							m.t.	2	5	-	20
BPH-E 60/340.65 M	505944040	340	1x230 V	744	4,1	DN 65 - PN 10	t°	75°	90°	110°	120°
							m.t.	1	4	-	18
BPH-E 120/340.65 M	505947040	340	1x230 V	1262	6,72	DN 65 - PN 10	t°	75°	90°	110°	120°
							m.t.	7	11	18	-
BPH-E 150/340.65 M	505948040	340	1x230 V	1767	9,2	DN 65 - PN 10	t°	75°	90°	110°	120°
							m.t.	7	11	18	-
BPH-E 120/360.80 M	505967040	360	1x230 V	1789	9,23	DN 80 - PN 10	t°	75°	90°	110°	120°
							m.t.	6	10	-	22
BPH-E 120/450.100 M	60129173	450	1x230 V	1789	9,23	DN 100 - PN 16	t°	75°	90°	110°	120°
							m.t.	6	10	-	22

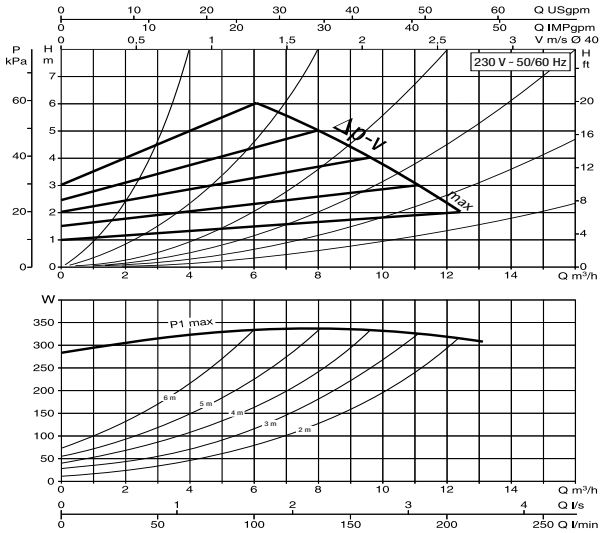
BPH-E 60/250.40 M

Δp-c (costante)



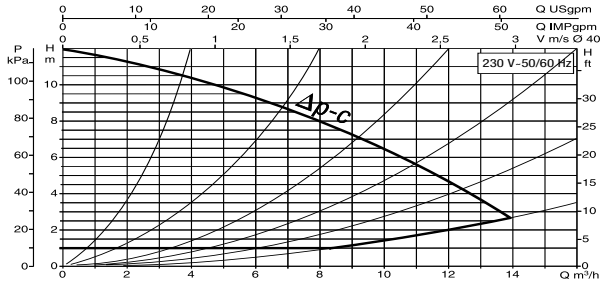


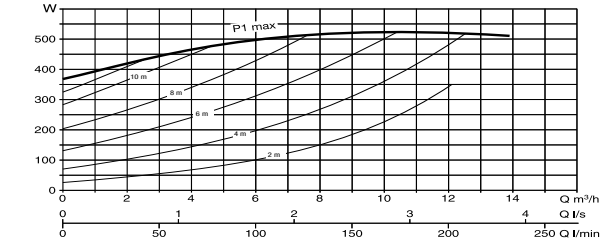
Δp-v (variabile)

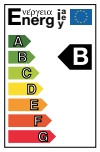


BPH-E 120/250.40 M

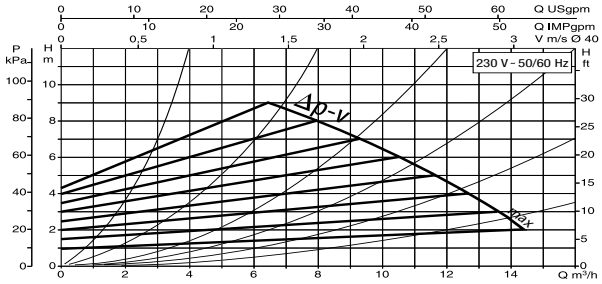
Δp-c (costante)

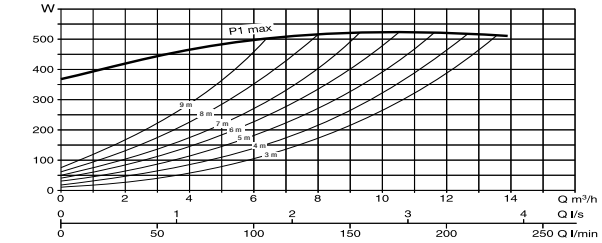






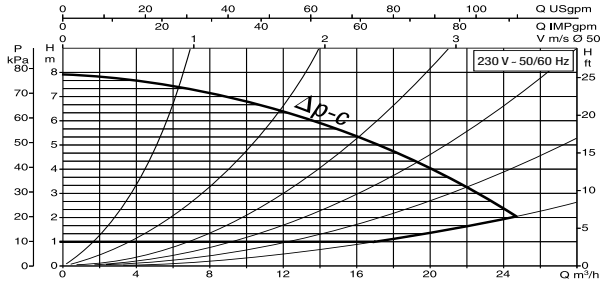
Δp-v (variabile)

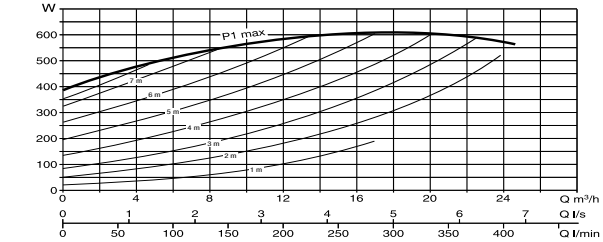


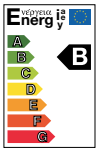


BPH-E 60/280.50 M

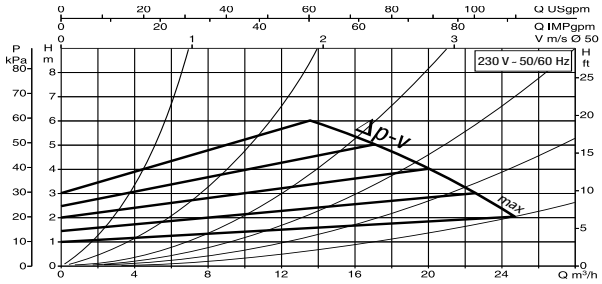
Δp-c (costante)

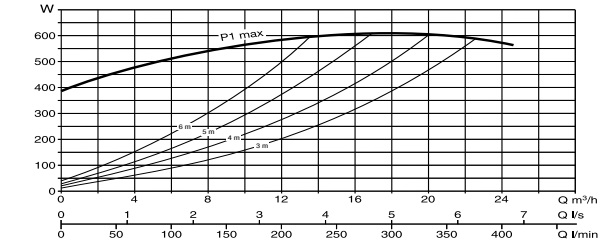






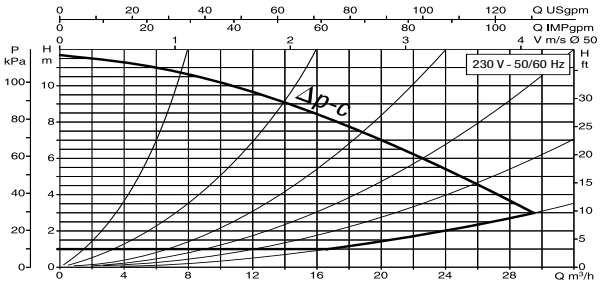
Δp-v (variabile)

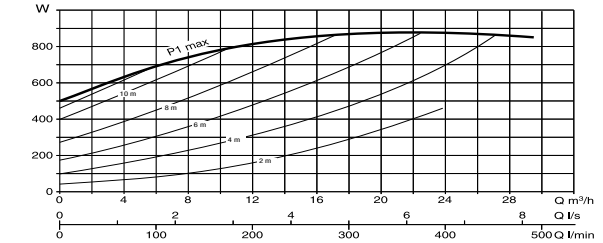


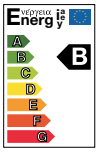


BPH-E 120/280.50 M

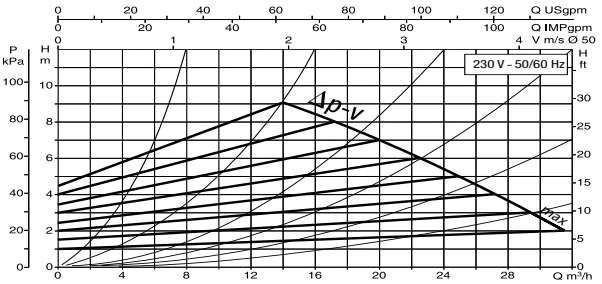
Δp-c (costante)

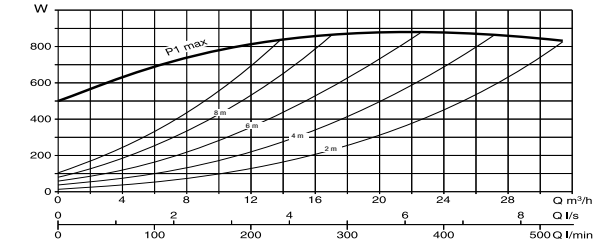






Δp-v (variabile)

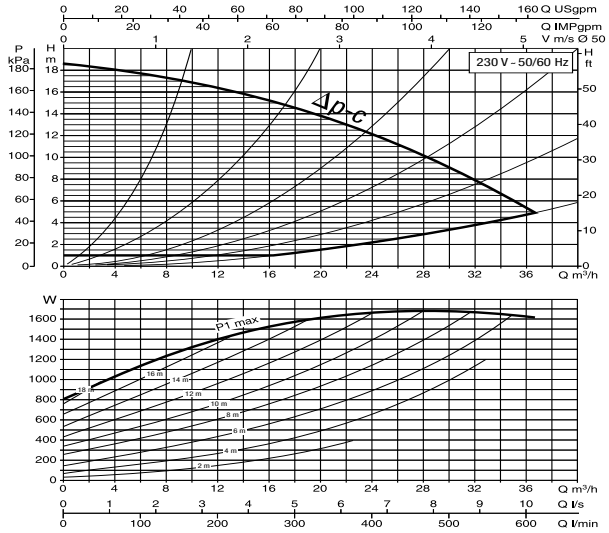


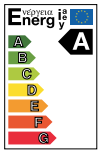


BPH-E
CIRCOLATORI ELETTRONICI

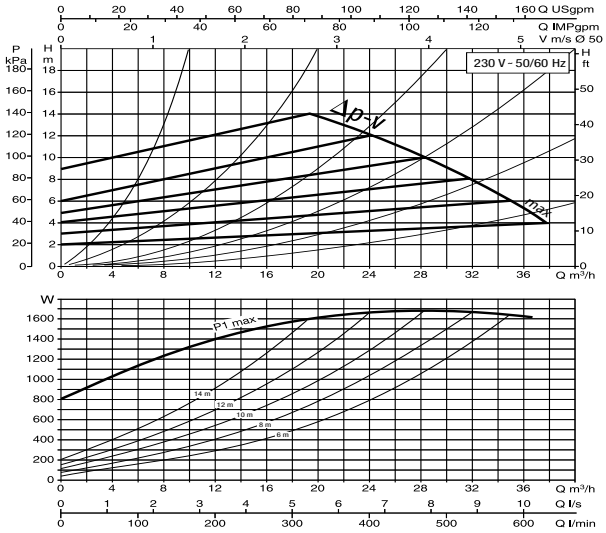
BPH-E 180/280.50 M

Δp-c (costante)



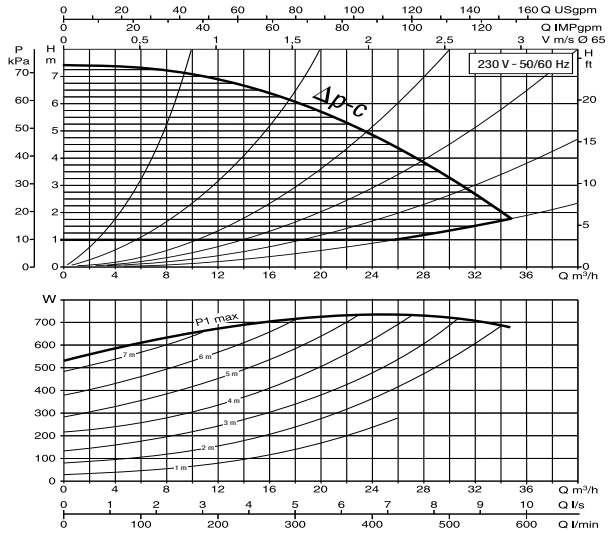


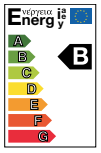
Δp-v (variabile)



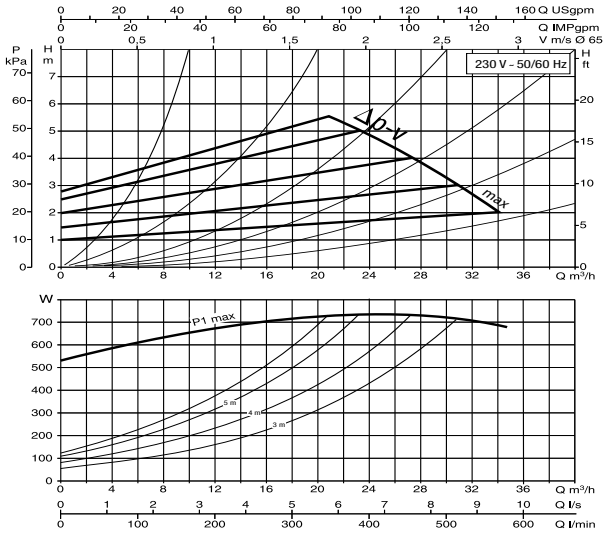
BPH-E 60/340.65 M

Δp-c (costante)



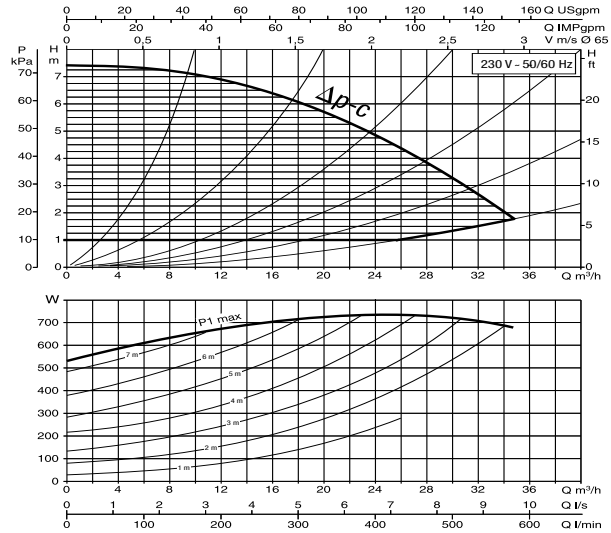


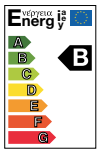
Δp-v (variabile)



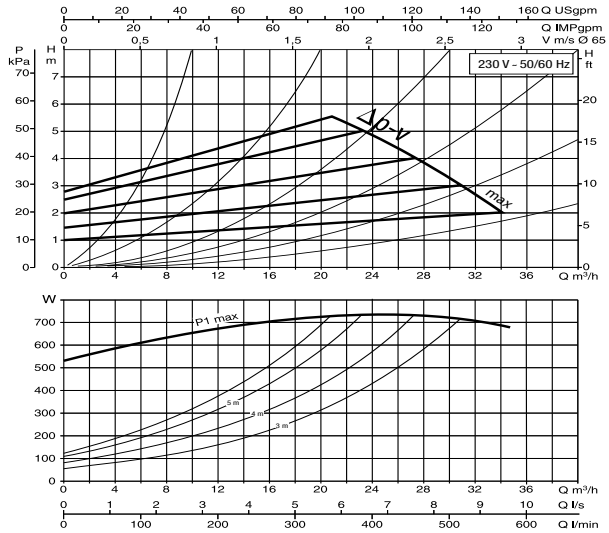
BPH-E 60/340.65 M

Δp-c (costante)





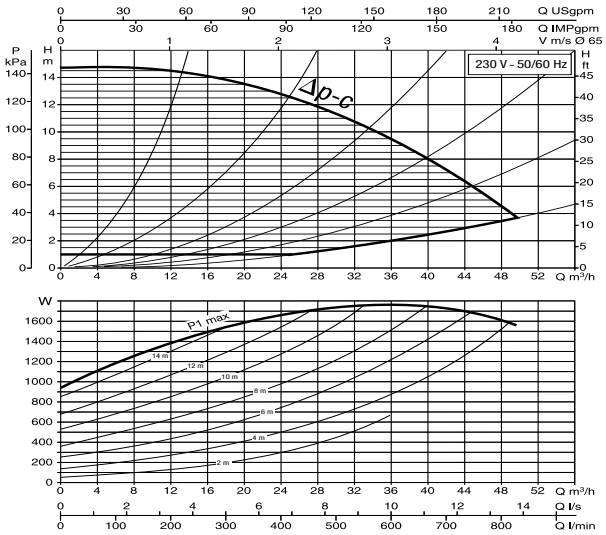
Δp-v (variabile)

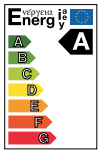


DAB PUMPS si riserva il diritto di apportare modifiche senza obbligo di preavviso

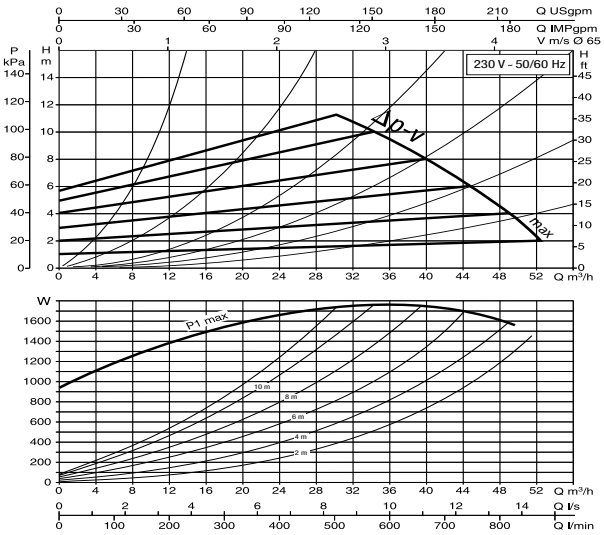
BPH-E 150/340.65 M

Δp-c (costante)



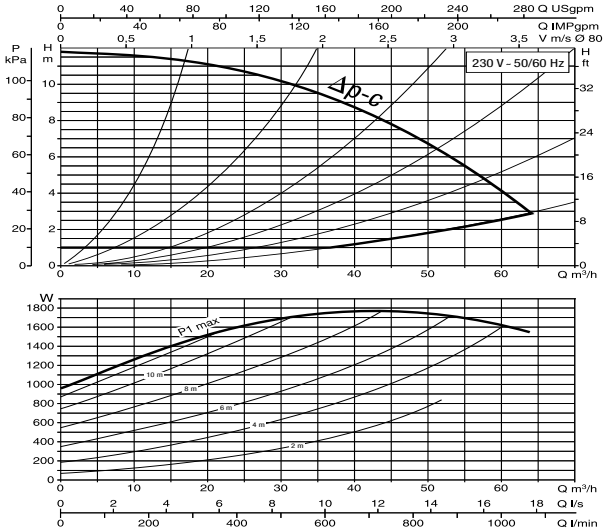


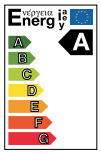
Δp-v (variabile)



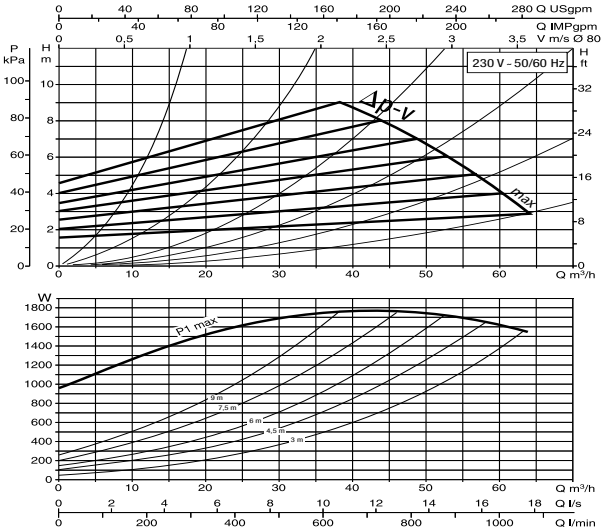
BPH-E 120/360.80 M

Δp-c (costante)



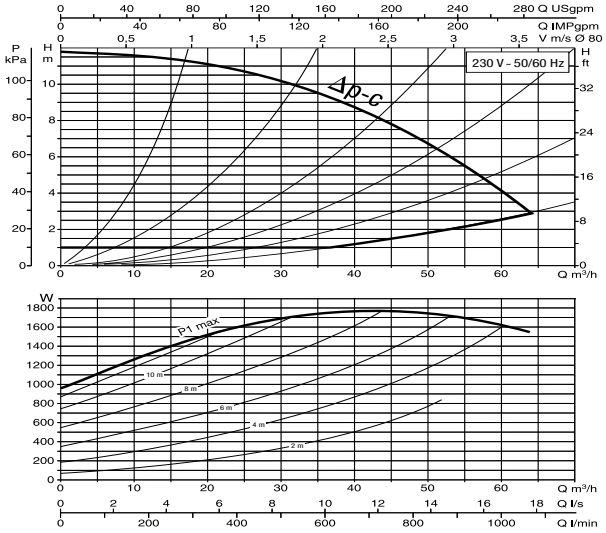


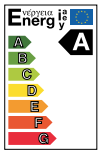
Δp-v (variabile)



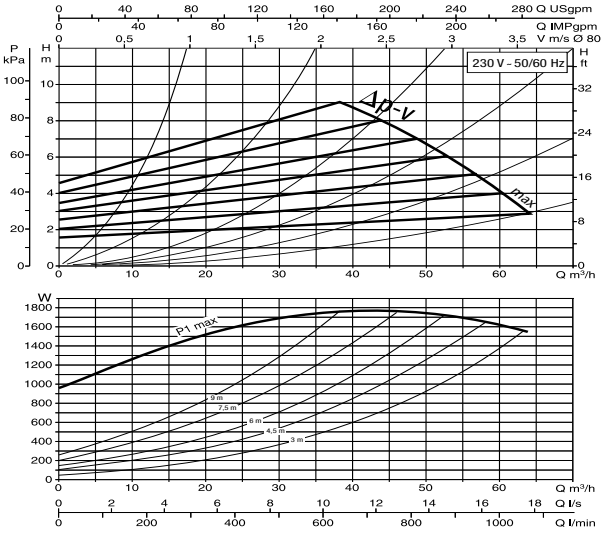
BPH-E 120/450.100 M

Δp-c (costante)





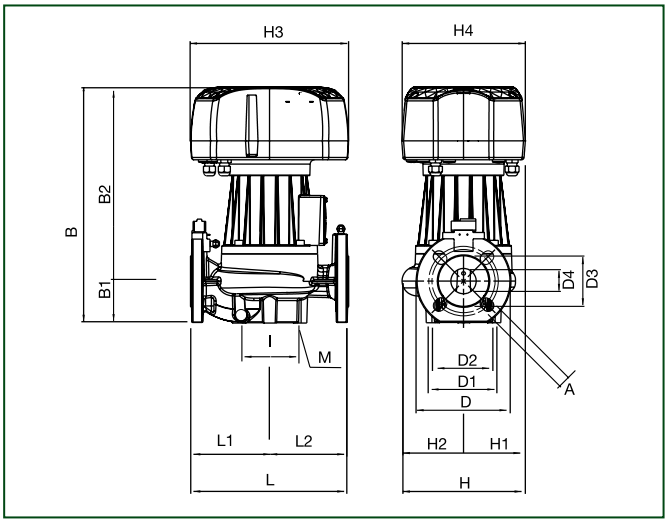
Δp-v (variabile)



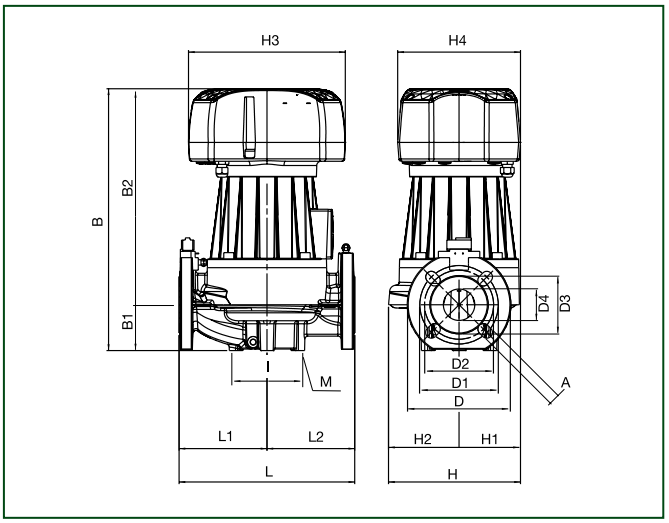
DAB PUMPS si riserva il diritto di apportare modifiche senza obbligo di preavviso

DIMENSIONI E PESI

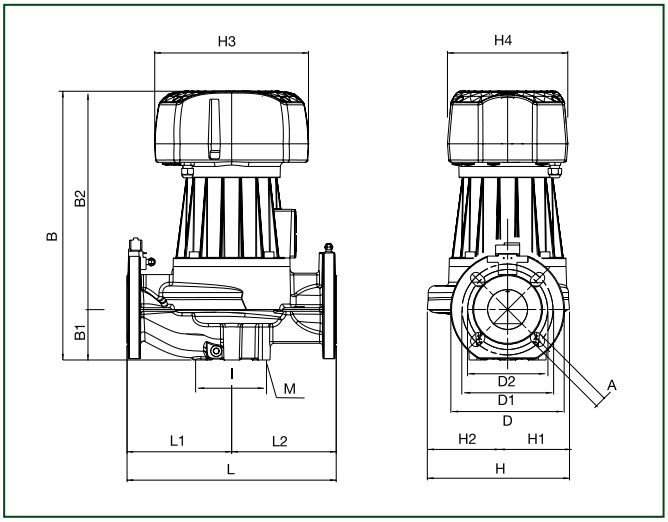
BPH-E 60/250.40 M - BPH-E 120/250.40 M



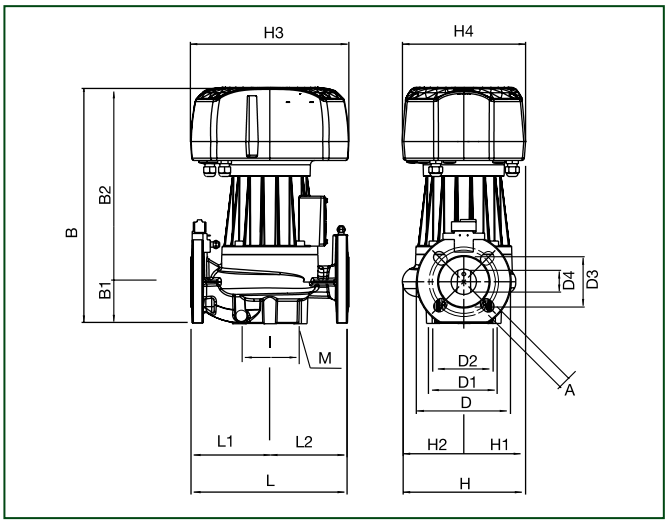
BPH-E 60/280.50 M - BPH-E 120/280.50 M - BPH-E 180/280.50 M



BPH-E 60/340.65 M - BPH-E 120/340.65 M - BPH-E 150/340.65 M



BPH-E 120/360.80 M



MODELLO	l	l1	l2	a	b	b1	b2	d	d1	d2	d3	d4	i	m	h	h1	h2	h3	h4	PESO KG
BPH-E 60/250-40	250	125	125	18	374	66	308	150	110	100	80	40	100	M10	195	83	112	250	196	17,7
BPH-E 120/250-40	250	125	125	18	374	66	308	150	100	100	80	40	100	M10	195	83	112	250	196	21,7
BPH-E 60/280-50	280	140	140	18	417	73	344	165	125	110	90	50	100	M10	210	96	114	250	196	24,2
BPH-E 120/280-50	280	140	140	18	417	73	344	165	125	110	90	50	100	M10	210	96	114	250	196	30,3
BPH-E 180/280-50	280	140	140	18	467	73	394	165	125	110	90	50	100	m10	210	96	114	250	196	30,3
BPH-E 60/340-65	340	170	170	18	437	82	355	185	145	130	110	65	100	m12	231	100	131	225	196	34,8
BPH-E 120/340-65	340	170	170	18	437	82	405	185	145	130	110	65	100	m12	231	100	131	225	196	36,9
BPH-E 150/340-65	340	170	170	18	437	82	405	185	145	130	110	65	100	m12	231	100	131	225	196	36,9
BPH-E 120/360-80	360	190	170	18	506	97	409	200	160	150	130	80	115	m12	232	100	132	250	196	44,4

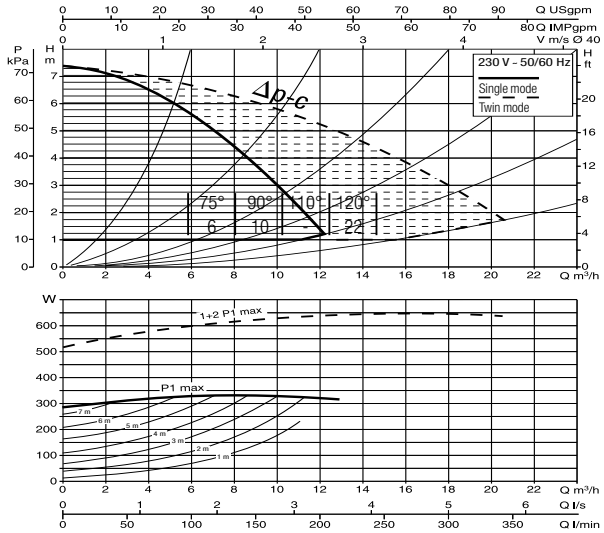
DAB PUMPS si riserva il diritto di apportare modifiche senza obbligo di preavviso

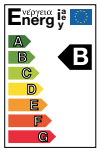
DATI TECNICI - GEMELLARI FLANGIATI

MODELLO	CODICE	INTERASSE mm	DATI ELETTRICI				MINIMA PRESSIONE DI BATTENTE				
			ALIMENTAZIONE 50 Hz	P1 MAX W	In A	CONTROFLANGE SU RICHIESTA					
DPH-E 60/250.40 M	505914040	250	1x230 V	344	2	DN 40 - PN 10	t°	75°	90°	110°	120°
							m.t.	1,6	4	-	19
DPH-E 120/250.40 M	505917040	250	1x230 V	528	3	DN 40 - PN 10	t°	75°	90°	110°	120°
							m.t.	6	9	-	23
DPH-E 60/280.50 M	505934040	280	1x230 V	606	3,37	DN 50 - PN 10	t°	75°	90°	110°	120°
							m.t.	4	7,5	-	21
DPH-E 120/280.50 M	505937040	280	1x230 V	893	4,84	DN 50 - PN 10	t°	75°	90°	110°	120°
							m.t.	2	5	-	20
DPH-E 180/280.50 M	505939040	280	1x230 V	1693	9,2	DN 50 - PN 10	t°	75°	90°	110°	120°
							m.t.	2	5	-	20
DPH-E 60/340.65 M	505954040	340	1x230 V	744	4,1	DN 65 - PN 10	t°	75°	90°	110°	120°
							m.t.	1	4	-	18
DPH-E 120/340.65 M	505957040	340	1x230 V	1262	6,72	DN 65 - PN 10	t°	75°	90°	110°	120°
							m.t.	7	11	18	-
DPH-E 150/340.65 M	505958040	340	1x230 V	1767	9,2	DN 65 - PN 10	t°	75°	90°	110°	120°
							m.t.	7	11	18	-
DPH-E 120/360.80 M	505977040	360	1x230 V	1789	9,23	DN 80 - PN 10	t°	75°	90°	110°	120°
							m.t.	6	10	-	22

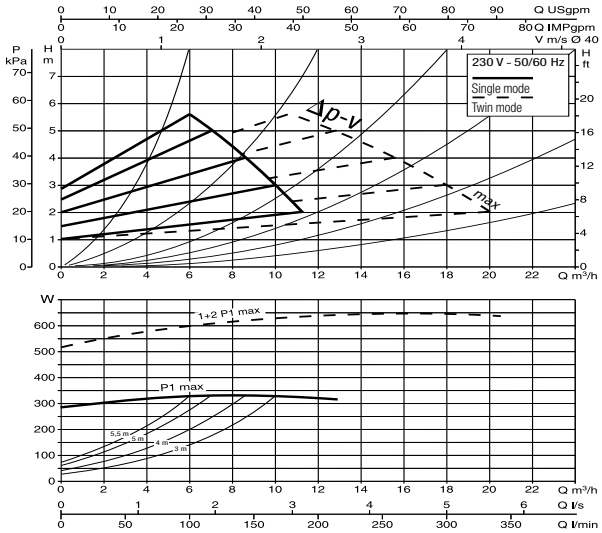
DPH-E 60/250.40 M

Δp-c (costante)





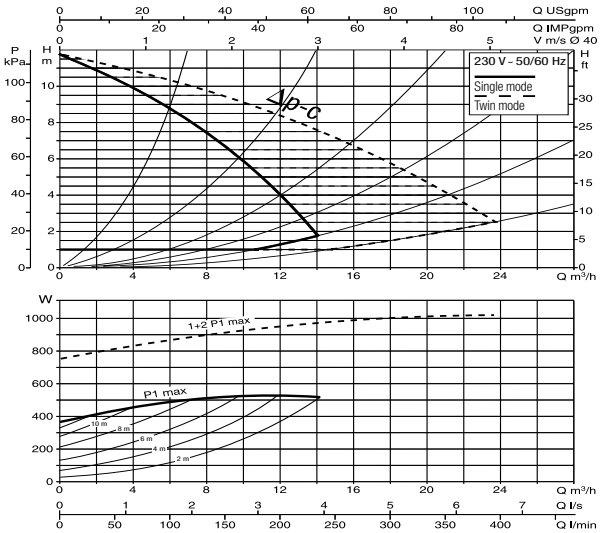
Δp-v (variabile)



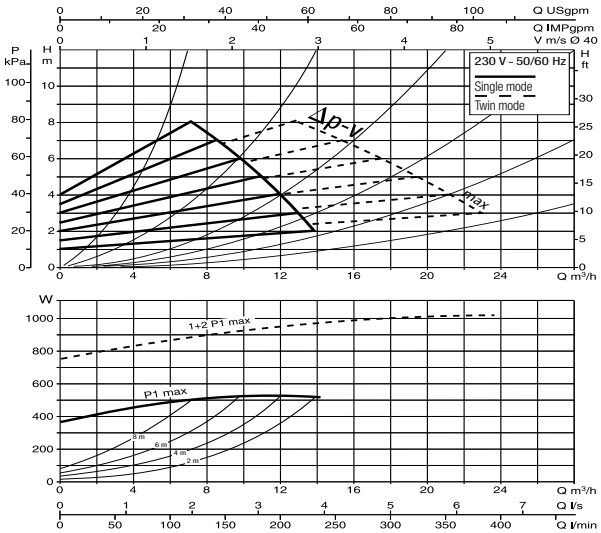
DPH-E
CIRCOLATORI ELETTRONICI

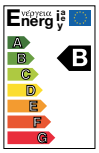
DPH-E 120/250.40 M

Δp-c (costante)



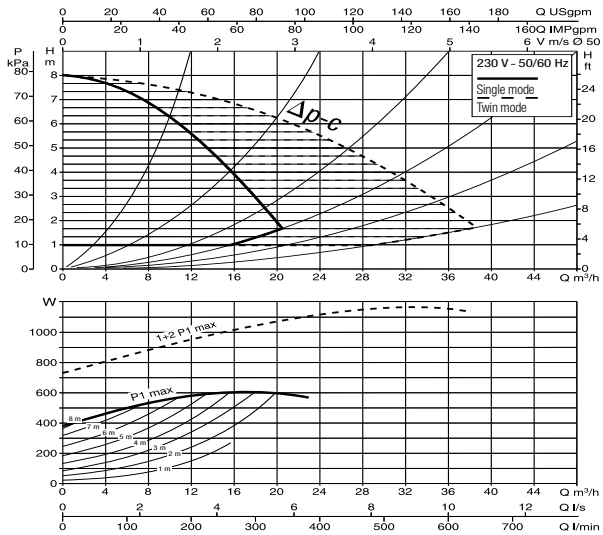
Δp-v (variabile)



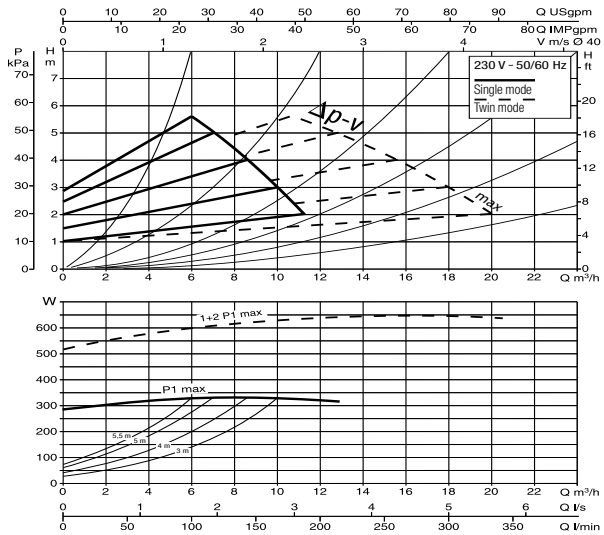


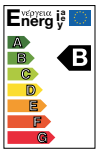
DPH-E 60/280.50 M

Δp-c (costante)



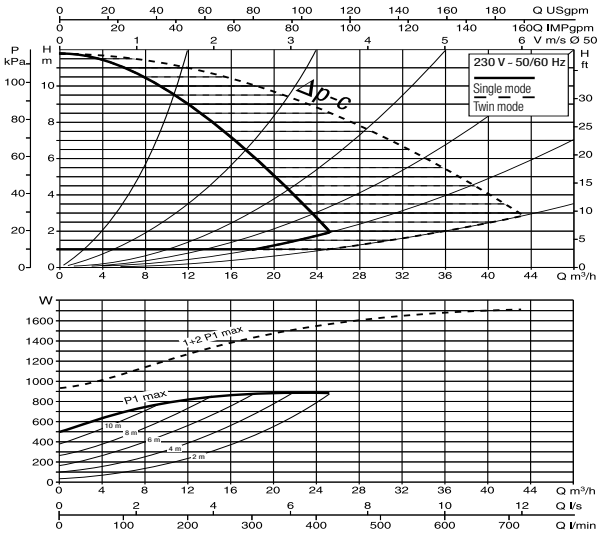
Δp-v (variabile)



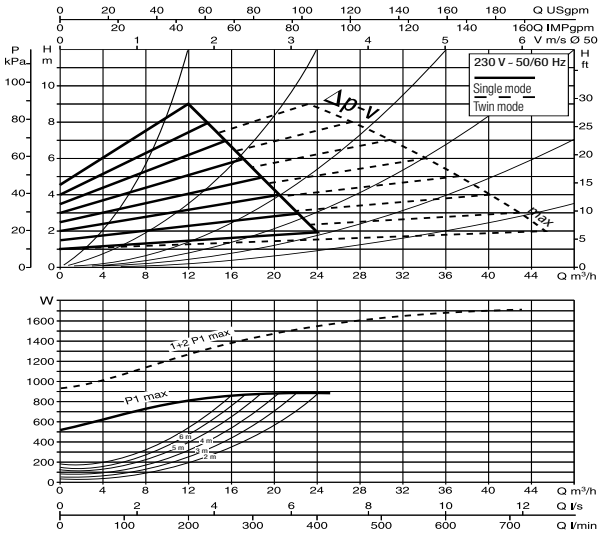


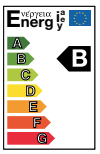
DPH-E 120/280.50 M

Δp-c (costante)



Δp-v (variabile)

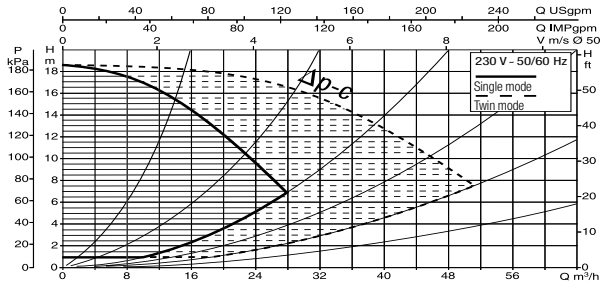


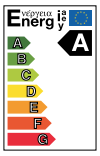


DAB PUMPS si riserva il diritto di apportare modifiche senza obbligo di preavviso

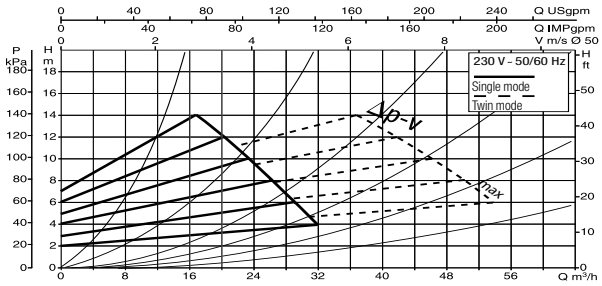
DPH-E 180/280.50 M

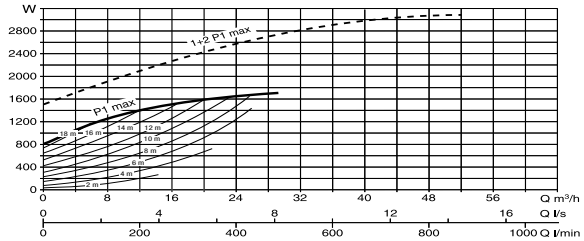
Δp-c (costante)

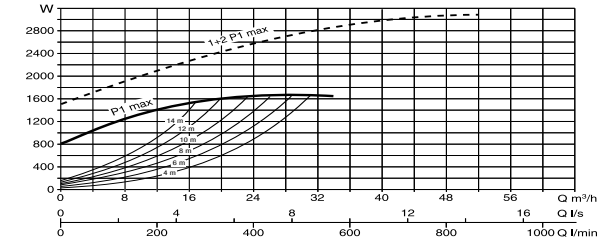




Δp-v (variabile)

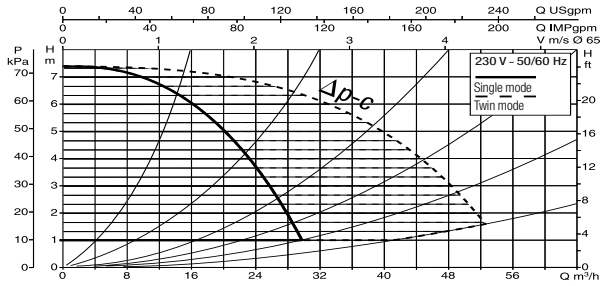


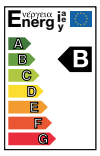




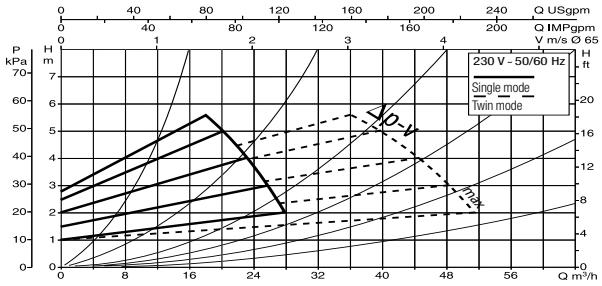
DPH-E 60/340.65 M

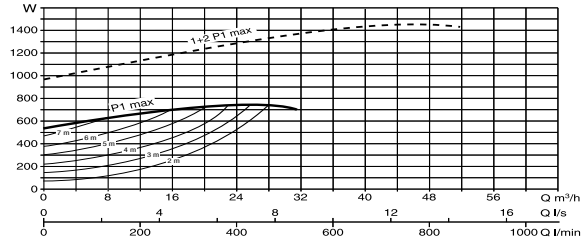
Δp-c (costante)

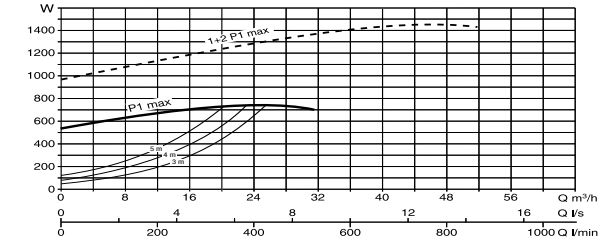




Δp-v (variabile)

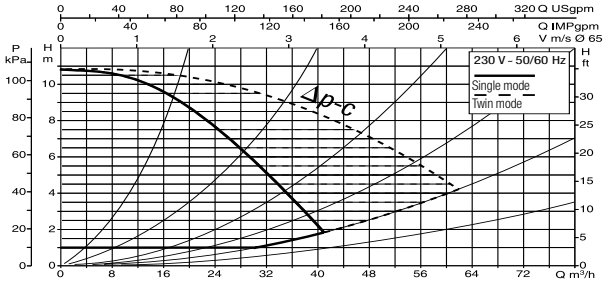


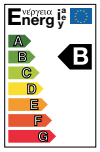




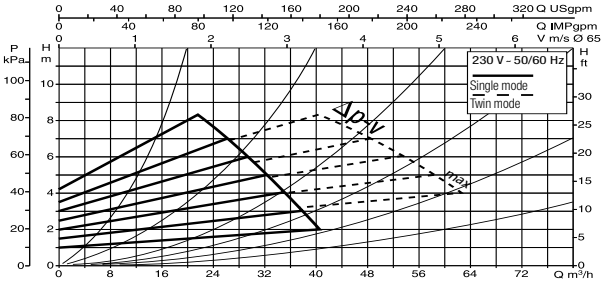
DPH-E 120/340.65 M

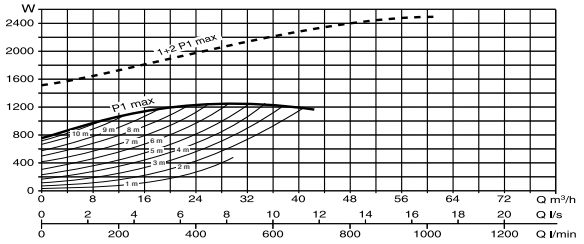
Δp-c (costante)

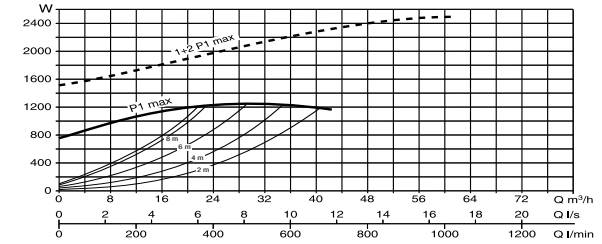




Δp-v (variabile)





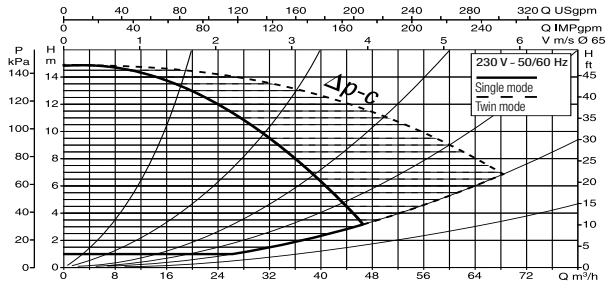


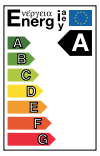
DAB PUMPS si riserva il diritto di apportare modifiche senza obbligo di preavviso

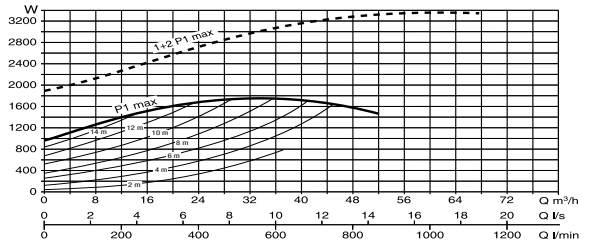
DPH-E
CIRCOLATORI ELETTRONICI

DPH-E 150/340.65 M

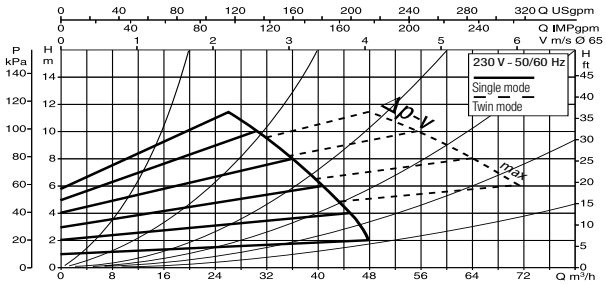
Δp-c (costante)

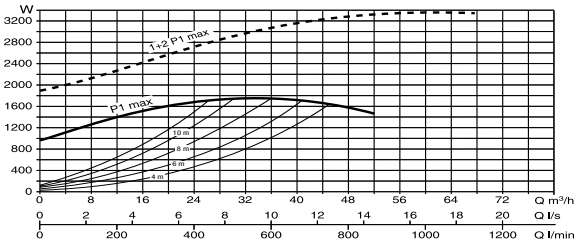






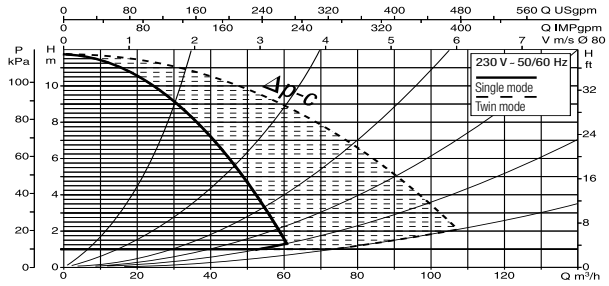
Δp-v (variabile)

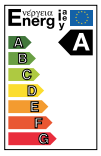


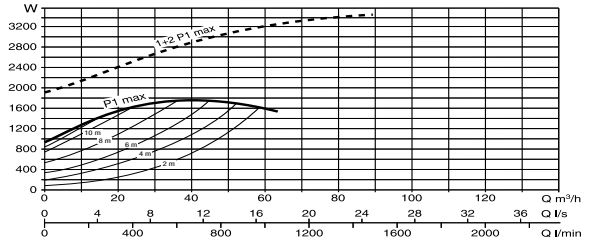


DPH-E 120/360.80 M

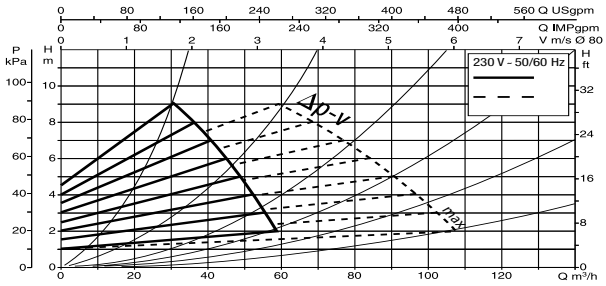
Δp-c (costante)

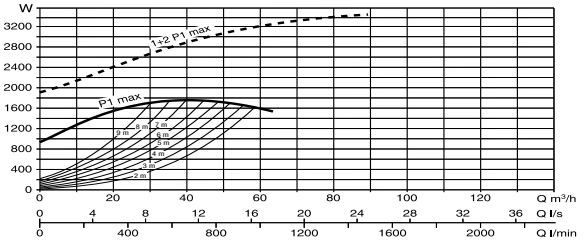






Δp-v (variabile)

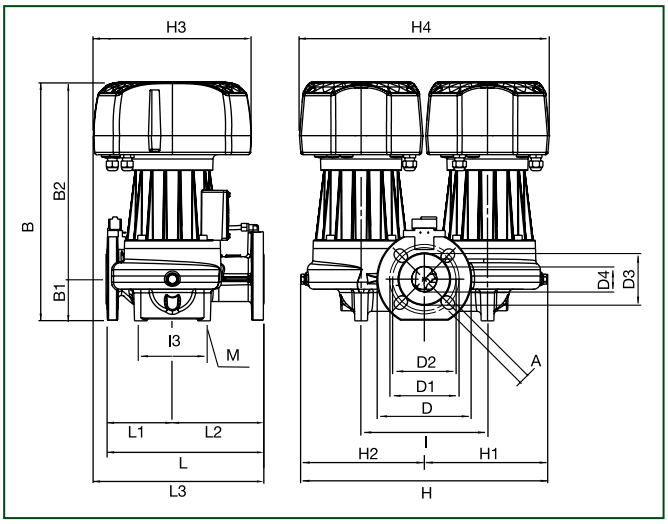




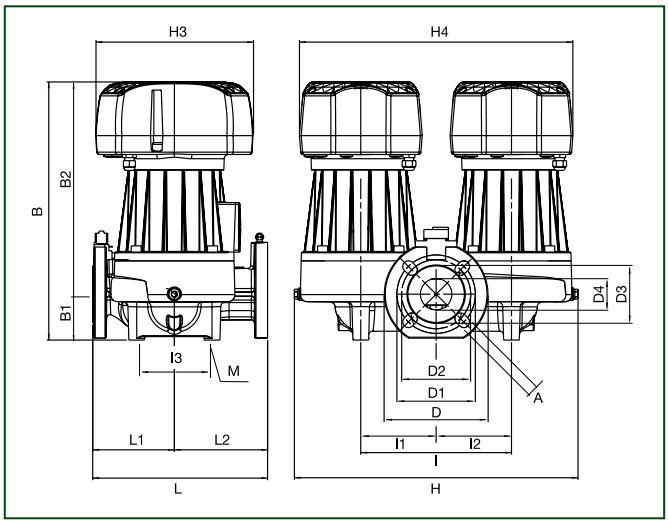
DAB PUMPS si riserva il diritto di apportare modifiche senza obbligo di preavviso

DIMENSIONI E PESI

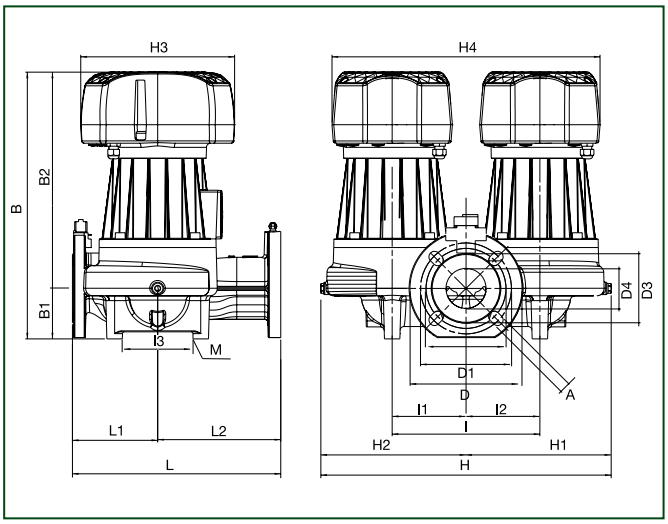
DPH-E 60/250.40 M - DPH-E 120/250.40 M



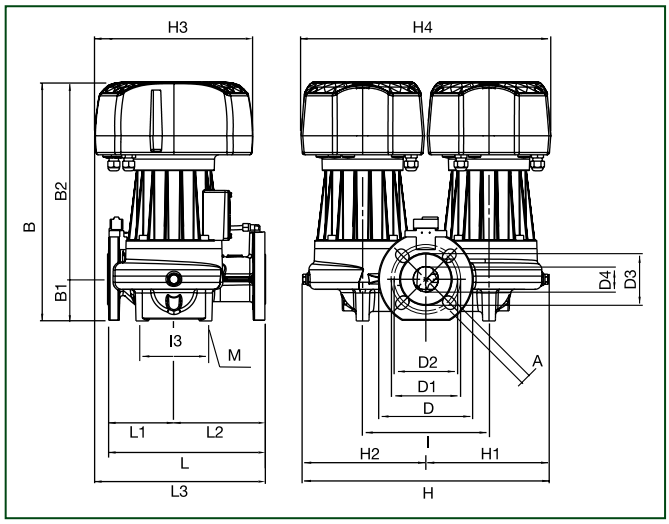
DPH-E 60/280.50 M - DPH-E 120/280.50 M - DPH-E 180/280.50 M



DPH-E 60/340.65 M - DPH-E 120/340.65 M - DPH-E 150/340.65 M



DPH-E 120/360.80 M



MODELLO	l	l1	l2	l3	a	b	b1	b2	d	d1	d2	d3	d4	i	i1	i2	i3	m	h	h1	h2	h3	h4	PESO KG
DPH-E 60/250-40	250	105	145	270	18	378	66	312	150	110	100	80	40	200	100	100	100	M12	389	194,5	195	250	396	42,7
DPH-E 120/250-40	250	105	145	270	18	378	66	312	150	110	100	80	40	200	100	100	100	M12	389	194,5	165	250	396	42,9
DPH-E 60/280-50	280	130	150	–	18	411	73	338	165	125	110	90	50	240	120	120	120	m14	452	226	226	250	436	67,2
DPH-E 120/280-50	280	130	150	–	18	411	73	338	165	125	110	90	50	240	120	120	120	m14	452	226	226	250	436	67,2
DPH-E 180/280-50	280	130	150	–	18	461	73	388	165	125	110	90	50	240	120	120	120	m14	452	226	226	250	436	73,2
DPH-E 60/340-65	340	138,5	201,5	–	18	433	82	351	185	145	130	110	65	240	120	120	240	m14	472	236	236	250	436	72,9
DPH-E 120/340-65	340	138,5	201,5	–	18	483	82	220	185	145	130	110	65	240	120	120	240	m14	472	236	236	250	436	77,9
DPH-E 150/340-65	340	138,5	201,5	–	18	483	82	220	185	145	130	110	65	240	120	120	240	m14	472	236	236	250	436	77,9
DPH-E 120/360-80	360	160	200	–	18	497	97	400	200	160	150	130	80	240	120	120	150	m14	478	239	239	250	436	89,9

DAB PUMPS si riserva il diritto di apportare modifiche senza obbligo di preavviso