


Standardised “EN 733” centrifugal pumps

-  Clean water
-  Industrial use



PERFORMANCE RANGE

- Flow rate up to **3000 l/min** (180 m³/h)
- Head up to **24 m**

APPLICATION LIMITS

- Manometric suction lift up to **7 m**
- Liquid temperature between **-10 °C** and **+90 °C**
- Ambient temperature between **-10 °C** and **+40 °C**
- Max. pressure in pump body **10 bar** (PN10)
- Continuous service **S1**

CONSTRUCTION AND SAFETY STANDARDS

EN 60335-1
IEC 60335-1
CEI 61-150

EN 60034-1
IEC 60034-1
CEI 2-3



Pump body dimensions in compliance with **EN 733**
EU REGULATION N. 547/2012

CERTIFICATIONS

Company with management system certified DNV
ISO 9001: QUALITY



INSTALLATION AND USE

- Water supply
- Pressure boosting
- Irrigation
- Water circulation in air-conditioning units
- Cleaning sets
- Firefighting sets
- Industrial applications
- Agricultural applications

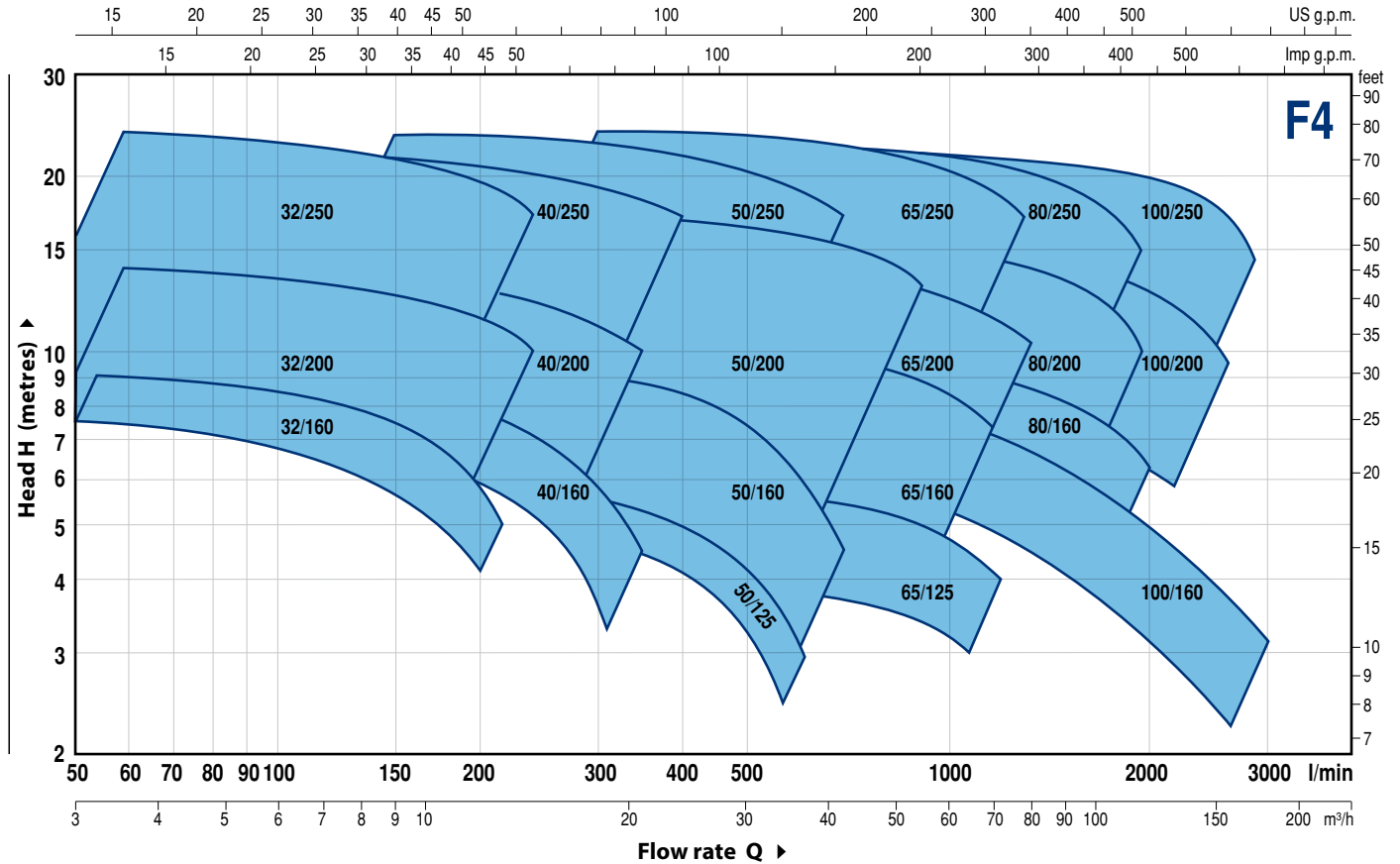
Installation needs to be undertaken in well ventilated closed areas or anyway protected from bad weather.

OPTIONS AVAILABLE ON REQUEST

- Counter flange KIT complete with bolts, nuts and washers
- Other voltages or 60 Hz frequency
- Compatibility with hotter or colder liquids
- Compatibility with hotter or colder environments

PERFORMANCE RANGE

50 Hz n = 1450 min⁻¹



PERFORMANCE DATA

50 Hz n = 1450 min⁻¹

MODEL	POWER (P ₂)			PERFORMANCE	
	Three-phase	kW	HP ▲	Q l/min	H metres
F4-32/160B	0.37	0.5	IE2	50 – 200	7.5 – 4.5
F4-32/160A	0.37	0.5		50 – 225	9 – 5
F4-32/200B	0.75	1	IE3	50 – 250	12.5 – 9
F4-32/200A	1.1	1.5		50 – 250	14 – 10.5
F4-32/200BH	0.75	1	IE3	50 – 150	11.3 – 9.2
F4-32/200AH	0.75	1		50 – 160	13.8 – 11
F4-32/250C	1.1	1.5	IE3	50 – 220	18.4 – 15
F4-32/250B	1.5	2		50 – 250	21.7 – 17.4
F4-32/250A	2.2	3		50 – 270	23.8 – 18.7
F4-40/160B	0.37	0.5	IE2	50 – 320	7.5 – 3.5
F4-40/160A	0.55	0.75		50 – 350	9 – 4.5
F4-40/200B	0.75	1	IE3	50 – 350	11.5 – 7
F4-40/200A	1.1	1.5		50 – 350	13.8 – 10
F4-40/250C	1.1	1.5	IE3	50 – 400	15.5 – 10
F4-40/250B	1.5	2		50 – 400	17.5 – 12
F4-40/250A	2.2	3		50 – 400	22 – 17
F4-50/125B	0.55	0.75	IE2	150 – 600	5 – 2
F4-50/125A	0.55	0.75		150 – 600	6 – 3
F4-50/160B	0.75	1	IE3	150 – 650	8 – 3.8
F4-50/160A	1.1	1.5		150 – 700	9.3 – 4.5
F4-50/200C	1.5	2	IE3	200 – 850	11 – 7.5
F4-50/200B	2.2	3		200 – 850	13 – 9.5
F4-50/200A	2.2	3	IE3	200 – 900	15 – 11.2
F4-50/200AR	3	4		200 – 900	17 – 13.2
F4-50/250D	1.1	1.5	IE3	150 – 650	12.5 – 5
F4-50/250C	1.5	2		150 – 700	14 – 5
F4-50/250B	2.2	3		150 – 700	18 – 10.5
F4-50/250A	2.2	3		150 – 700	20 – 13
F4-50/250AR	3	4		150 – 700	23.5 – 17

MODEL	POWER (P ₂)			PERFORMANCE	
	Three-phase	kW	HP ▲	Q l/min	H metres
F4-65/125B	0.75	1	IE3	300 – 1100	4.7 – 3
F4-65/125A	1.1	1.5		300 – 1200	5.7 – 4
F4-65/160C	1.1	1.5	IE3	300 – 1100	7.5 – 5.5
F4-65/160B	1.5	2		300 – 1200	9.1 – 5.7
F4-65/160A	2.2	3	IE3	300 – 1200	10.1 – 7
F4-65/200A	2.2	3		300 – 1250	12 – 8.5
F4-65/200AR	3	4	IE3	300 – 1300	14 – 10
F4-65/250B	4	5.5		200 – 1250	21.8 – 15.5
F4-65/250A	5.5	7.5	IE3	200 – 1300	23.5 – 17
F4-80/160D	1.5	2		300 – 2000	6.3 – 2.5
F4-80/160C	2.2	3	IE3	300 – 2000	7.5 – 3.8
F4-80/160B	2.2	3		300 – 2000	8.8 – 5
F4-80/160A	3	4	IE3	300 – 2000	10 – 6.2
F4-80/200B	4	5.5		300 – 1800	14 – 9
F4-80/200A	5.5	7.5	IE3	300 – 1900	15.5 – 10.5
F4-80/250B	5.5	7.5		300 – 1800	19.5 – 13.5
F4-80/250A	7.5	10	IE3	300 – 1950	22 – 15
F4-100/160B	2.2	3		400 – 2600	8.3 – 3.5
F4-100/160A	3	4	IE3	400 – 2800	10 – 4.7
F4-100/200C	4	5.5		400 – 2300	12.7 – 7
F4-100/200B	5.5	7.5	IE3	400 – 2400	14.2 – 8.5
F4-100/200A	5.5	7.5		400 – 2600	15.8 – 9.5
F4-100/250B	7.5	10	IE3	400 – 2600	18.5 – 11.5
F4-100/250A	9.2	12.5		400 – 2900	22 – 13.5

Q = Flow rate

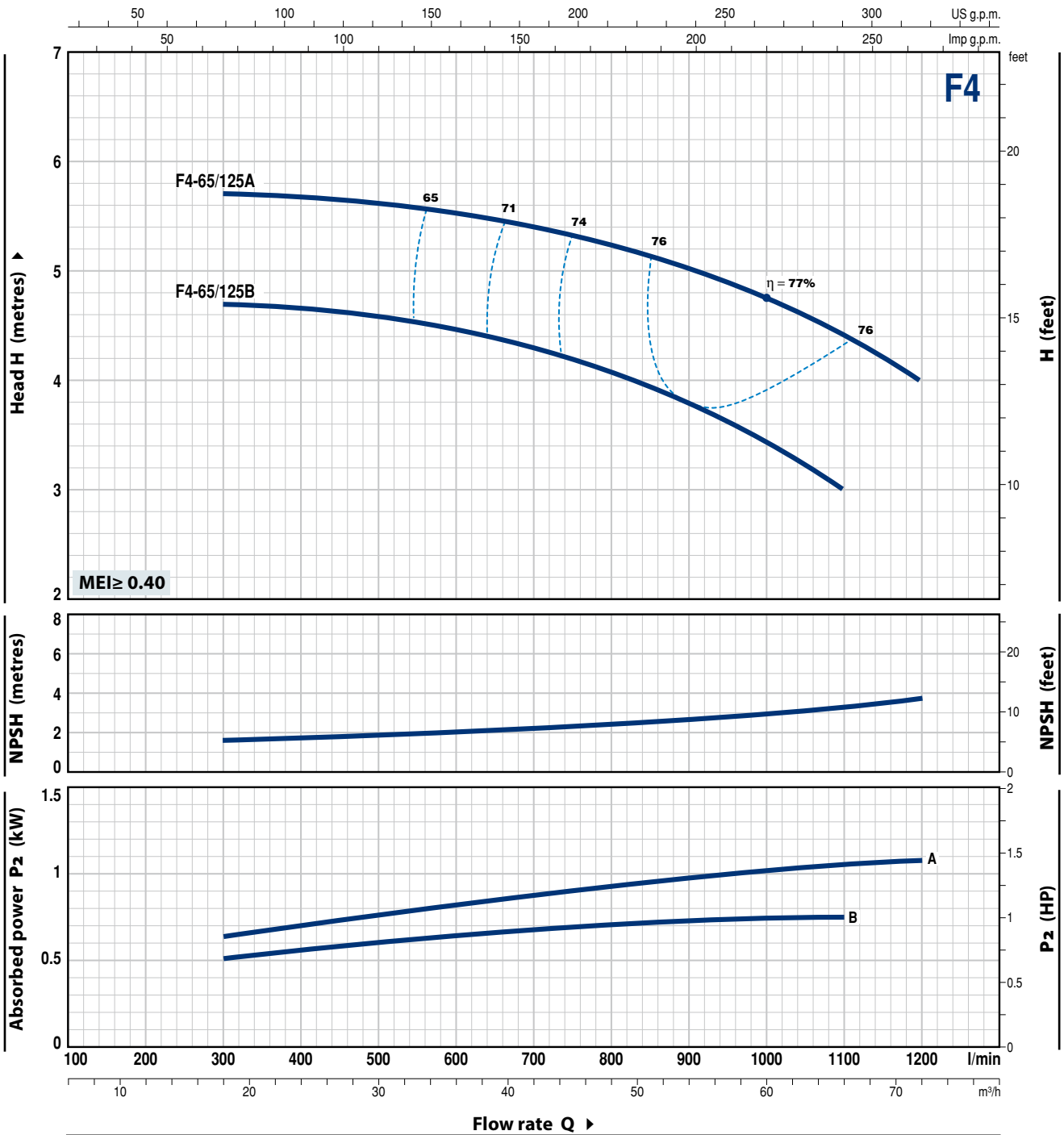
H = Total manometric head

Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.

▲ Three-phase motor efficiency class (IEC 60034-30-1)

CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n = 1450 min⁻¹ HS = 0 m



MODEL	POWER (P ₂)		Q	Flow rate											
	kW	HP		m ³ /h	18	24	30	36	42	48	54	60	66	72	
Three-phase			l/min	300	400	500	600	700	800	900	1000	1100	1200		
F4-65/125B	0.75	1	H metres	4.7	4.7	4.6	4.5	4.3	4.1	3.8	3.4	3			
F4-65/125A	1.1	1.5		5.7	5.7	5.6	5.5	5.4	5.2	5	4.7	4.4	4		

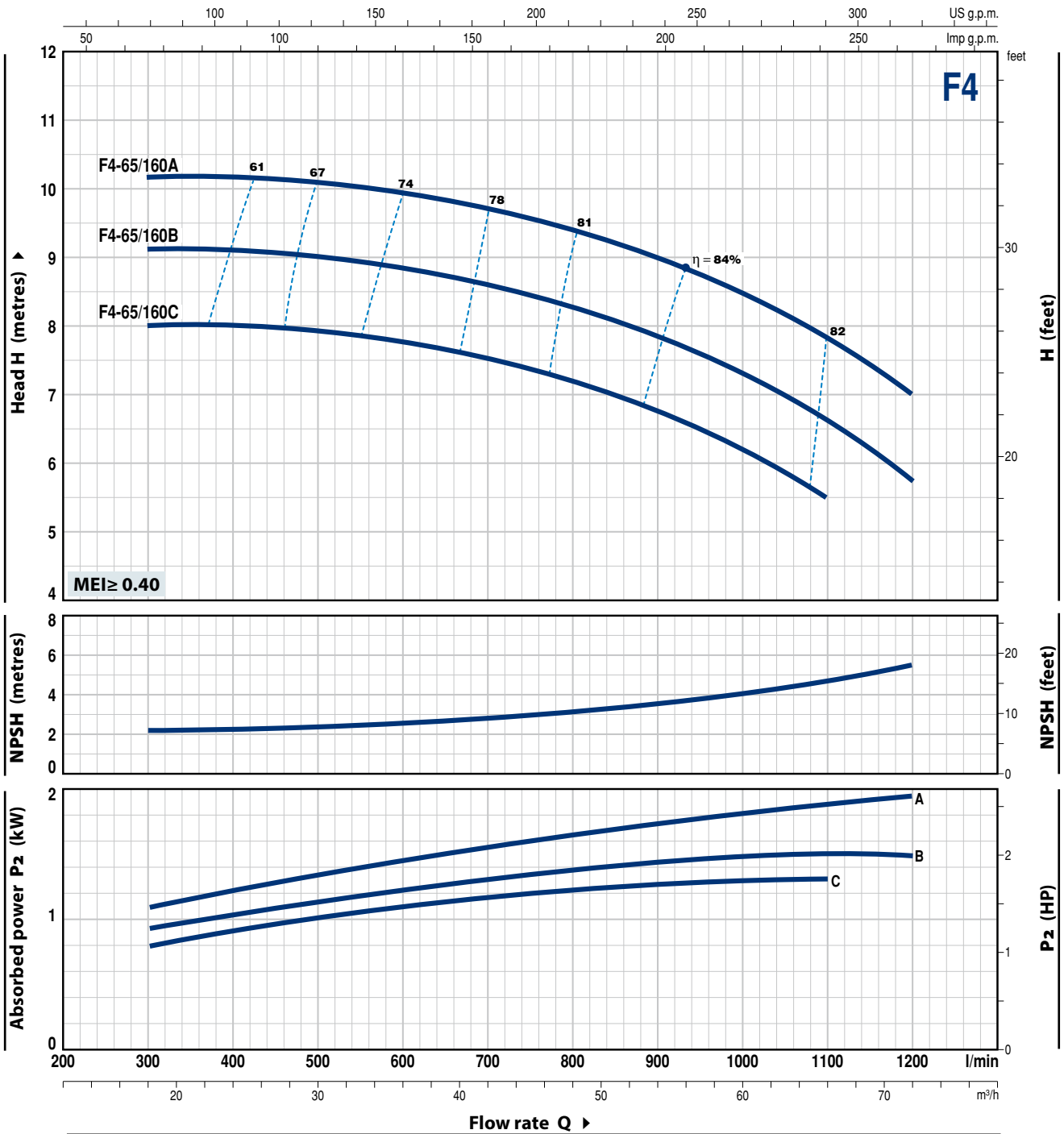
Q = Flow rate H = Total manometric head HS = Suction height

Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.

F4-65/160

CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n = 1450 min⁻¹ HS = 0 m



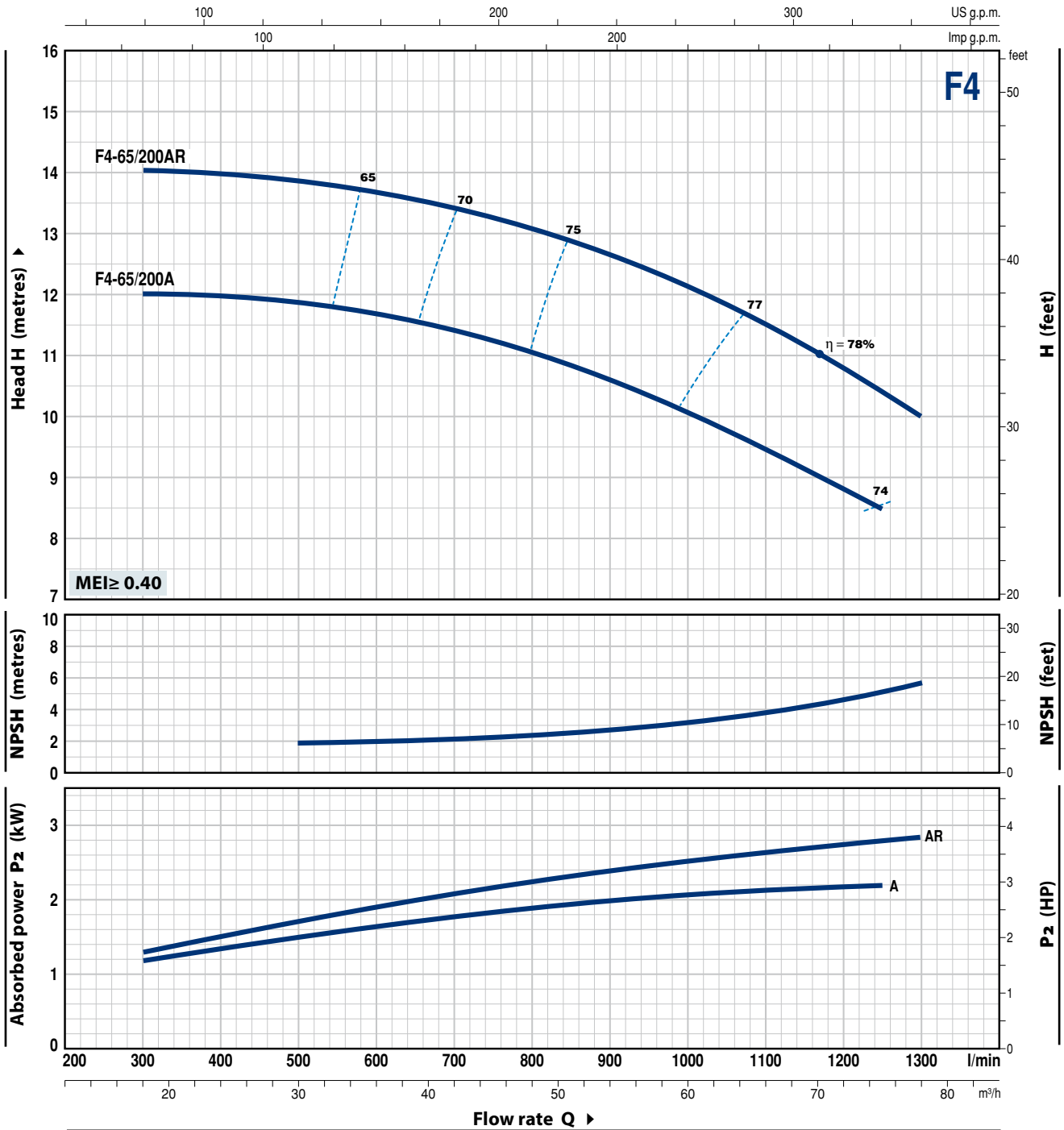
MODEL	POWER (P ₂)		Q	Flow rate											
	kW	HP		m ³ /h	18	24	30	36	42	48	54	60	66	72	
Three-phase			l/min	300	400	500	600	700	800	900	1000	1100	1200		
F4-65/160C	1.1	1.5	H metres	8	8	7.9	7.7	7.5	7.2	6.7	6.2	5.5			
F4-65/160B	1.5	2		9.1	9.1	9	8.8	8.6	8.3	7.8	7.3	6.6	5.7		
F4-65/160A	2.2	3		10.1	10.1	10.1	9.9	9.7	9.4	9	8.5	7.8	7		

Q = Flow rate H = Total manometric head HS = Suction height

Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.

CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n = 1450 min⁻¹ HS = 0 m



MODEL	POWER (P ₂)		Q	18	24	30	36	42	48	54	60	66	72	75	78
	kW	HP		l/min	300	400	500	600	700	800	900	1000	1100	1200	1250
F4-65/200A	2.2	3	H metres	12	12	11.9	11.6	11.4	11	10.6	10.1	9.5	8.8	8.5	
F4-65/200AR	3	4		14	13.9	13.8	13.6	13.4	13.1	12.7	12.1	11.5	10.8	10.3	10

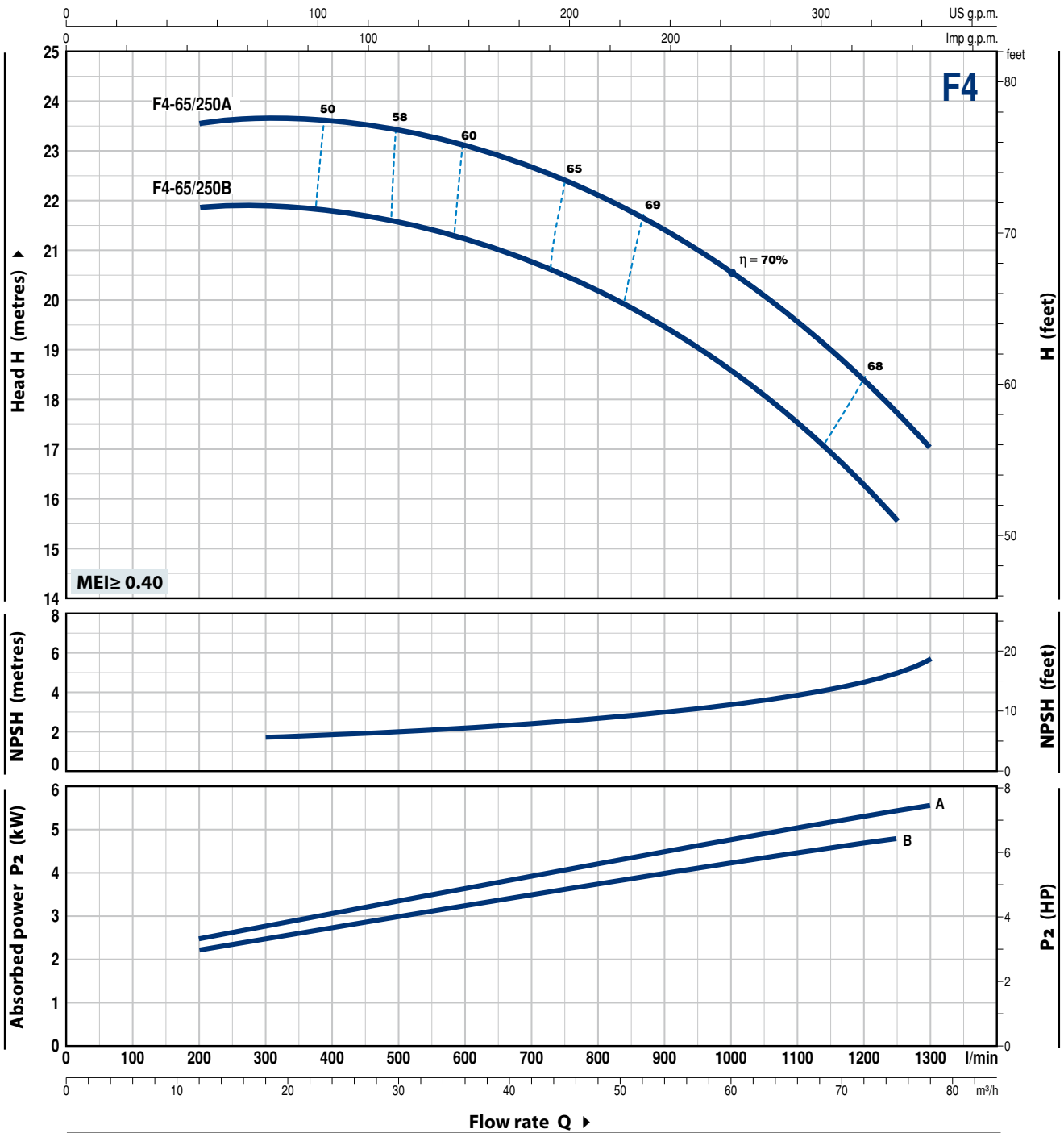
Q = Flow rate H = Total manometric head HS = Suction height

Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.

F4-65/250

CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n = 1450 min⁻¹ HS = 0 m



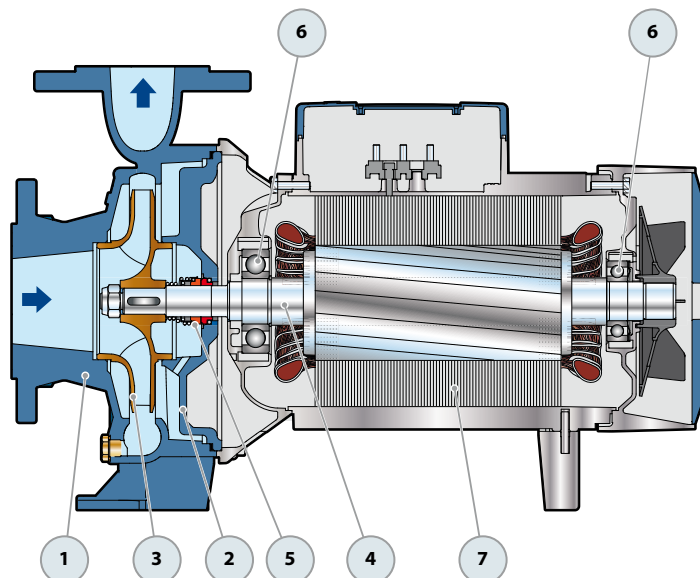
MODEL	POWER (P ₂)		Q	Flow rate													
	kW	HP		m ³ /h	12	18	24	30	36	42	48	54	60	66	72	75	78
Three-phase			l/min	200	300	400	500	600	700	800	900	1000	1100	1200	1250	1300	
F4-65/250B	4	5.5	H metres	21.8	21.8	21.7	21.5	21.2	20.7	20.2	19.5	18.6	17.5	16.2	15.5		
F4-65/250A	5.5	7.5		23.5	23.5	23.5	23.4	23.1	22.6	22.1	21.5	20.5	19.6	18.5	17.8	17	

Q = Flow rate H = Total manometric head HS = Suction height

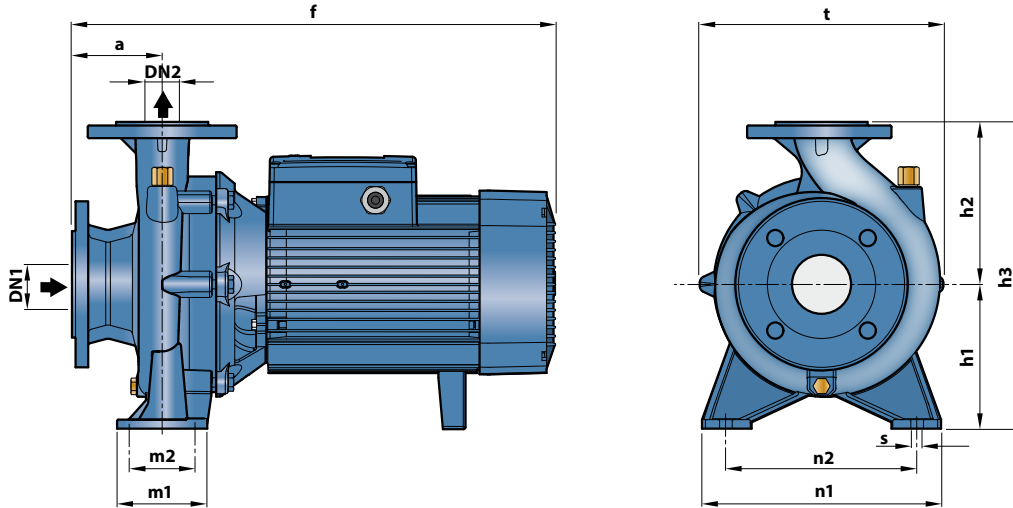
Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.

POS. COMPONENT CONSTRUCTION CHARACTERISTICS

1 PUMP BODY	Cast iron, complete with flanged suction and delivery ports					
2 BODY BACKPLATE	Cast iron					
3 IMPELLER	Brass for F4-32/160, 32/200, 40/160, 40/200, 50/125, 50/160					
4 MOTOR SHAFT	Stainless steel AISI 431					
5 MECHANICAL SEAL	Pump Model	Seal Model	Shaft Diameter	Stationary ring	Rotational ring	Elastomer
	F4-32/160 F4-40/160	F4-50/125	FN-20	Ø 20 mm	Graphite	Ceramic NBR
	F4-32/200 F4-40/200	F4-50/160 F4-65/125	FN-24	Ø 24 mm	Graphite	Ceramic NBR
	F4-50/200 F4-65/200 F4-65/160	F4-80/160 F4-100/160	FN-32 NU	Ø 32 mm	Graphite	Ceramic NBR
	F4-32/250 F4-40/250	F4-50/250	FN-38	Ø 38 mm	Graphite	Ceramic NBR
	F4-65/250 F4-80/200	F4-100/200	FN-40 NU	Ø 40 mm	Graphite	Ceramic NBR
	F4-80/250	F4-100/250	FH-45 NU	Ø 45 mm	Graphite	Ceramic NBR
6 BEARINGS	Pump Model	Model	Pump Model	Model		
	F4-32/160 F4-40/160 F4-50/125	6206 ZZ-C3 / 6204 ZZ	F4-32/250 F4-40/250 F4-50/200 F4-50/250 F4-65/160 F4-65/200 F4-80/160 F4-100/160	6208 ZZ-C3 / 6206 ZZ-C3		
	F4-32/200 F4-40/200 F4-50/160 F4-65/125	6307 ZZ-C3 / 6206 ZZ-C3	F4-65/250 F4-80/200 F4-80/250 F4-100/200 F4-100/250	6310 ZZ-C3 / 6308 ZZ-C3		
7 ELECTRIC MOTOR	F4: with 4 poles three-phase 230/400 V - 50 Hz ➔ The three-phase pumps are fitted with high performance motors up to P₂=0.37 kW in class IE2 and from P₂=0.75 kW in class IE3 (IEC 60034-30-1) – Insulation: class F – Protection: IP 55					

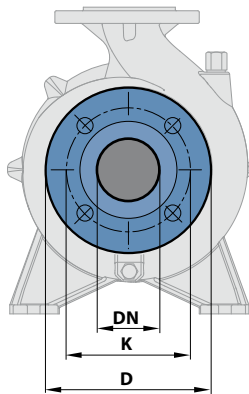


DIMENSIONS AND WEIGHT



MODEL	DIMENSIONS mm													kg													
	DN1	DN2	a	f	h3	h1	h2	t	n2	n1	m1	m2	s														
Three-phase																											
F4-32/160B	50	32	80	412	292	132	160	242	190	240	100	70	14	31.2													
F4-32/160A																31.2											
F4-32/200B																	43.4										
F4-32/200A																	43.5										
F4-32/200BH					100	469	340	160	180	270				95		42.3											
F4-32/200AH																42.4											
F4-32/250C						522	405	180	225	330	250	320		125	95	64.1											
F4-32/250B						568										63.1											
F4-32/250A												68.7															
F4-40/160B	65	40	80	412	292	132	160	240	190	240	100	70	14	32.5													
F4-40/160A															32.9												
F4-40/200B																46.0											
F4-40/200A																46.2											
F4-40/250C					100	489	340	160	180	275	212	265		125	95	59.7											
F4-40/250B						522	405	180	225	328	250	320		125	95	60.1											
F4-40/250A						568										72.4											
F4-50/125B						431	292	132	160	242	190	240					32.2										
F4-50/125A			100	489	340	160	180	269	212	265	100	70	14	44.4													
F4-50/160B							200	316								59.2											
F4-50/160A							529	360						200	316		68.3										
F4-50/200C							576										68.5										
F4-50/200B			100	576	360	180	225	337	250	320	125	95	18	68.8													
F4-50/200A														522					59.9								
F4-50/200AR														568	405	180	225	337	250	320	125	95	68.7				
F4-50/250D														568									69.1				
F4-50/250C													78.0														
F4-50/250B													50.2														
F4-50/250A													50.4														
F4-65/125B	80	65	100	511	340	160	180	291	212	280	125	95	14	55.0													
F4-65/125A																						58.7					
F4-65/160C														533	360		200	300					65.0				
F4-65/160B														579									72.0				
F4-65/160A						582	405	180	225	340	250	320		160	120	18	78.4										
F4-65/200A																	627	450	200	250	373	280	360	160	120	18	111.2
F4-65/200AR																	565										139.6
F4-65/250B																	611	405	180	225	330	250	320	125	95	14	65.8
F4-65/250A			125	655	430	200	280	362	280	360	160	120	18	67.3													
F4-80/160D							673	480						200	280	405	315	400	160	120	18	70.0					
F4-80/160C							655															76.4					
F4-80/160B							673	480						200	280	405	315	400	160	120	18	100.0					
F4-80/160A			125	655	430	200	280	362	280	360	160	120	18	130.2													
F4-80/200B														694	505	225	422	315	400					149.5			
F4-80/200A														673										137.6			
F4-80/250B														622										91.0			
F4-80/250A			140	694	505	225	422	315	400	160	120	18	18	97.0													
F4-100/160B														657	480	200	280	391	280	360	160	120	18	122.0			
F4-100/160A														622										116.0			
F4-100/200C														657										124.1			
F4-100/200B			140	694	505	225	422	315	400	160	120	18	18	143.0													
F4-100/200A														789										159.3			
F4-100/250B														143.0													
F4-100/250A														159.3													

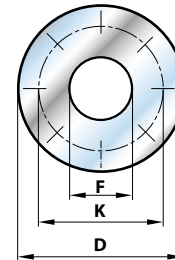
FLANGED PORTS



DN FLANGES mm	D mm	K mm	HOLES	
			N°	Ø (mm)
32	140	100	4	18
40	150	110		
50	165	125		
65	185	145		
80	200	160	8	
100	220	180		
125	250	210		

COUNTER FLANGES

(CAN BE ORDERED SEPARATELY)



DN FLANGES mm	F COUNTERFLANGES	D mm	K mm	HOLES	
				N°	Ø (mm)
32	1¼"	140	100	4	18
40	1½"	150	110		
50	2"	165	125		
65	2½"	185	145		
80	3"	200	160	8	
100	4"	220	180		
125	5"	250	210		

ABSORPTION

MODEL	VOLTAGE	
	230–240 V	400–415 V
Three-phase		
F4-32/160B	1.9 A	1.1 A
F4-32/160A	1.9 A	1.3 A
F4-32/200B	3.6 A	2.1 A
F4-32/200A	4.0 A	2.3 A
F4-32/200BH	3.3 A	1.9 A
F4-32/200AH	3.5 A	2.0 A
F4-32/250C	5.7 A	2.6 A
F4-32/250B	7.3 A	3.3 A
F4-32/250A	7.8 A	5.2 A
F4-40/160B	2.1 A	1.2 A
F4-40/160A	2.8 A	1.6 A
F4-40/200B	3.6 A	2.1 A
F4-40/200A	4.2 A	2.4 A
F4-40/250C	5.5 A	2.6 A
F4-40/250B	6.1 A	3.5 A
F4-40/250A	8.5 A	5.2 A
F4-50/125B	2.3 A	1.4 A
F4-50/125A	2.6 A	1.5 A
F4-50/160B	3.3 A	2.1 A
F4-50/160A	4.2 A	2.4 A
F4-50/200C	6.1 A	3.5 A
F4-50/200B	8.0 A	4.6 A
F4-50/200A	9.0 A	5.2 A
F4-50/200AR	10.6 A	6.8 A
F4-50/250D	4.9 A	2.8 A
F4-50/250C	5.9 A	3.4 A
F4-50/250B	8.5 A	4.9 A
F4-50/250A	9.9 A	5.7 A
F4-50/250AR	11.8 A	6.8 A

MODEL	VOLTAGE	
	230–240 V	400–415 V
Three-phase		
F4-65/125B	3.6 A	2.1 A
F4-65/125A	4.5 A	2.6 A
F4-65/160C	5.2 A	2.7 A
F4-65/160B	5.9 A	3.4 A
F4-65/160A	7.8 A	4.5 A
F4-65/200A	9.0 A	5.2 A
F4-65/200AR	11.8 A	6.8 A
F4-65/250B	17.3 A	9.5 A
F4-65/250A	21.7 A	13.5 A
F4-80/160D	5.9 A	3.4 A
F4-80/160C	8.1 A	4.7 A
F4-80/160B	9.2 A	5.3 A
F4-80/160A	10.6 A	6.8 A
F4-80/200B	13.8 A	9.5 A
F4-80/200A	18.2 A	12.8 A
F4-80/250B	20.8 A	13.5 A
F4-80/250A	25.6 A	14.8 A
F4-100/160B	9.0 A	5.2 A
F4-100/160A	11.2 A	6.5 A
F4-100/200C	14.2 A	9.5 A
F4-100/200B	17.8 A	12.1 A
F4-100/200A	20.8 A	13.5 A
F4-100/250B	26.8 A	15.9 A
F4-100/250A	34.1 A	19.7 A