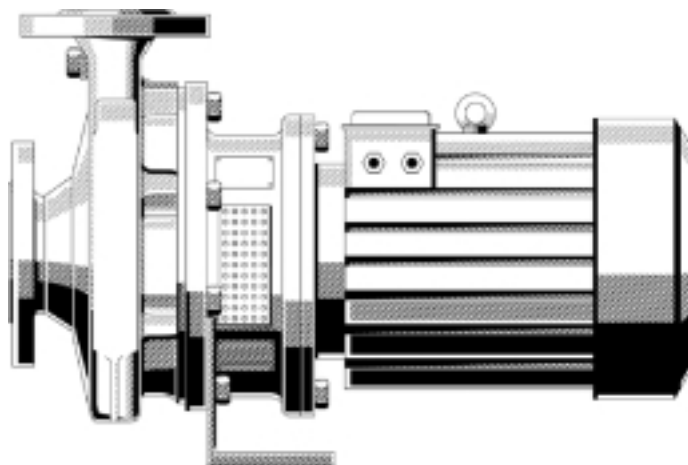


Close-coupled pumps



Fields of application

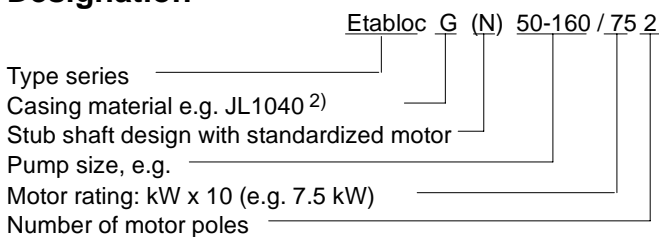
- Water supply
- Sprinkling
- Irrigation
- Drainage
- Heating systems
- Air-conditioning systems
- Drinking water
- Service water
- Hot water
- Cooling water
- Swimming pool water
- Sea water
- Fire-fighting water
- Brackish water
- Condensate
- Brine
- Oils
- Cleaning agents

Operating data

Q up to 580 m³/h, 161 l/s
 H up to 95 m
 t -30 to +140 °C
 p₂ up to 16 bar¹⁾

1) see pressure/temperature limits, page 5

Designation



1) to EN 1561 = GJL-250

Shaft seal

Mechanical seal to DIN 24 960

Design/Variants

Volute casing pumps, single-stage³⁾, with ratings to EN 733. The shaft is fitted with a replaceable shaft sleeve in the shaft seal area. Volute casing and impeller supplied with replaceable wear rings⁴⁾.

3) Etabloc 32-23 double-stage

4) except Etabloc 25-20 and 32-23

Etabloc GN, MN, SN, BN, CN

Pump and motor flanged together to form a close-coupled unit, with standardized motor.

Pump shaft and motor shaft are rigidly connected.

Etabloc G, M

Pump and motor flanged together to form a close-coupled unit, with common shaft

Drive

Standard version Etabloc N

Surface-cooled KSB-IEC three-phase squirrel cage motor.

Winding: up to 2.2 kW 220-240 V/380-420 V
 3kW and above 380-420/660-725 V
 Design: up to 4 kW IM V1
 5.5 kW and above IM V15

Enclosure: IP 55
 Thermal class: F with temperature sensors: 3 PTC resistors
 Operating mode: continuous operation S1
 or
 surface-cooled three-phase squirrel cage motor as described above, but West European brand to KSB's choice.

Flameproof version Etabloc N

Surface-cooled IEC three-phase squirrel cage motor, West European brand to KSB's choice.

Winding: up to 1.85 kW 220-240 V/380-420 V
 for 2.5 kW and above 380-420/660-725 V
 Design: up to 3.3 kW IM V1
 4.6 kW and above IM V15

Enclosure: IP 55 or IP 54
 Type of protection: EExe II
 Thermal class: T3
 Operating mode: continuous operation S1

Standard version Etabloc G, M

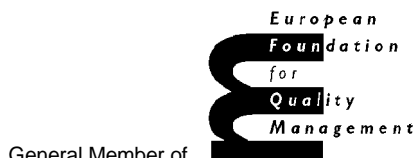
Surface-cooled KSB three-phase squirrel cage motor with longer shaft and special flange

Winding: up to 2.2 kW: 230/400 V
 for 3 kW and above: 400/690 V
 Design: up to 4 kW: without foot
 5.5 kW and above: with foot

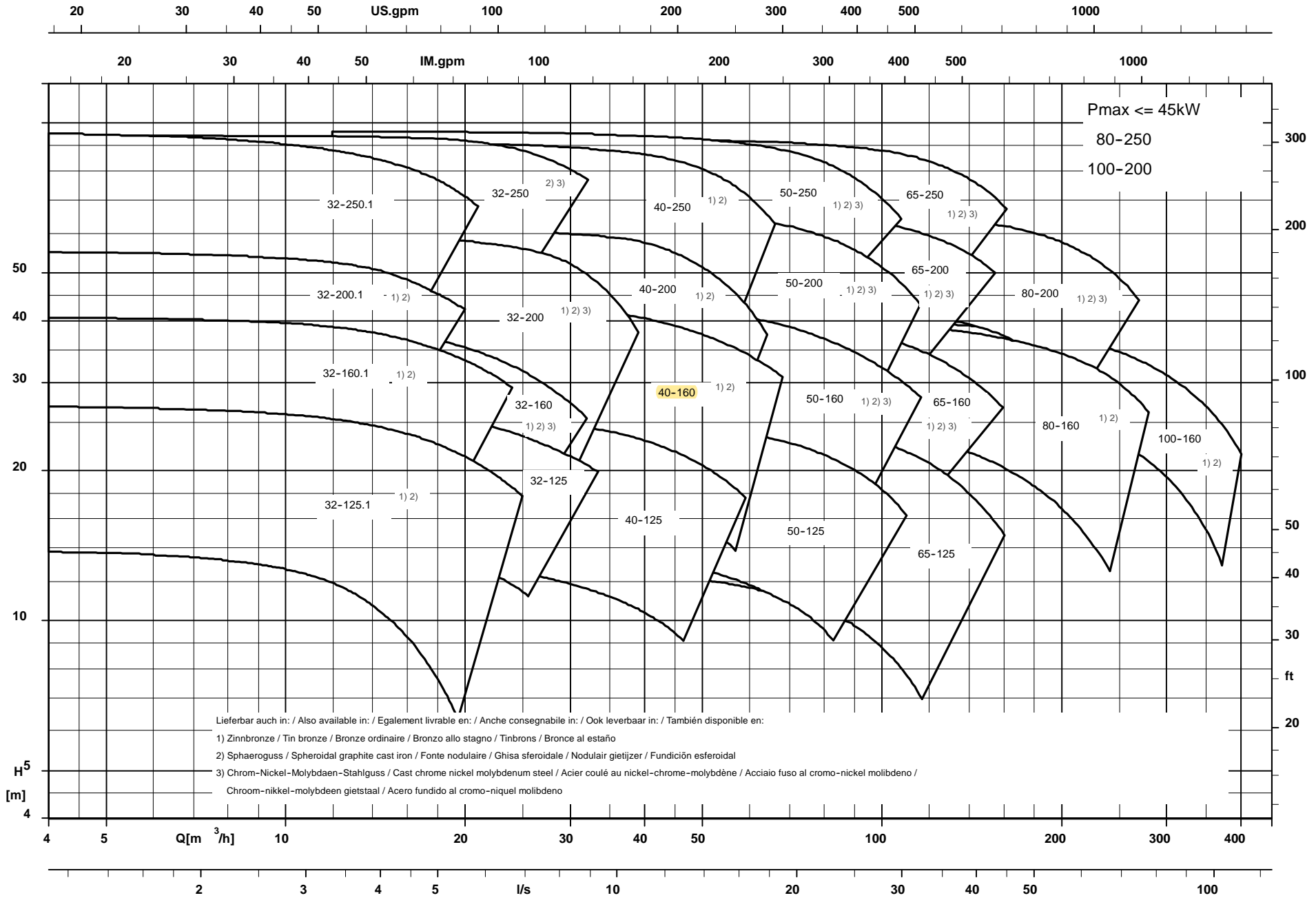
Enclosure: IP 55 or IP 54
 Thermal class: F
 Operating mode: continuous operation S1

Contact guard:

Cover plates on drive lantern to EN 294



General Member of



Lieferbar auch in: / Also available in: / Egalement livrable en: / Anche consegnabile in: / Ook leverbaar in: / También disponible en:

- 1) Zinnbronze / Tin bronze / Bronze ordinaire / Bronzo allo stagno / Tinbrons / Bronce al estaño
- 2) Sphaeroguss / Spheroidal graphite cast iron / Fonte nodulaire / Ghisa sferoidale / Nodulair gietijzer / Fundición esferoidal
- 3) Chrom-Nickel-Molybdaen-Stahlguss / Cast chrome nickel molybdenum steel / Acier coulé au nickel-chrome-molybdène / Acciaio fuso al cromo-nichel molibdeno / Chrom-nikkel-molybdeen gietstaal / Acero fundido al cromo-niquel molibdeno

1167.4052/7



Etabloc

Etabloc G, M 25-20, 32-23

Medium handled	Application limits	Materials Casing/Impeller		Shaft seal Mechanical seal		Reference code	Comments
		Grey cast iron/ grey cast iron	Grey cast iron/ tin bronze	BSV/GG	BVE/GG		
		G	M	4	7		
Water ¹⁾							
Condensate ²⁾	t ± 110 °C p ± 10 bar	X			X	G7	Only Etabloc G 25-20
Cooling water ¹⁾ (no anti-freezes)	t ± 60 °C ⁵⁾ p ± 10 bar	X		X		G4	open circuit: M 4 required
Cooling water pH value ²⁾ ≥ 7.5 (with anti-freeze) ³⁾	t -30-+110 °C p ± 10 bar	X			X	G7	Only Etabloc G 25-20
Dam water ¹⁾	t ± 60 °C ⁵⁾ p ± 10 bar		X	X		M4	
Heating water ²⁾	t ± 110 °C p ± 10 bar	X		X		G4	If used as circulating pump to DIN 4752: p _{max} ± 10 bar
Partly desalinated water ¹⁾	t ± 120 °C p ± 10 bar	X			X	G7	Only Etabloc G 25-20
Pure water ⁴⁾	t ± 60 °C ⁶⁾ p ± 10 bar	X			X	G7	Only Etabloc G 25-20
Raw water ¹⁾	t ± 60 °C ⁵⁾ p ± 10 bar	X		X		G4	
Slightly contaminated water ¹⁾	t ± 60 °C ⁵⁾ p ± 10 bar	X		X		G4	
Swimming-pool water ¹⁾ (fresh water)	t ± 60 °C p ± 10 bar	X		X		G4	Also applies to requirements to DIN 19 643.
Coolants, cooling brines							
Cooling brine, inorganic, pH value ²⁾ ≥ 7.5	t -30-+25 °C p ± 10 bar	X			X	G7	Only Etabloc G 25-20
Water with anti-freeze, pH value ²⁾ ≥ 7.5 ¹⁾⁵⁾	t -30-+110 °C p ± 10 bar	X			X	G7	Only Etabloc G 25-20
Cleaning agents							
Bottle rinsing lyes		X			X	G7	Only Etabloc G 25-20

- 1) General criteria for results of water analysis: pH value ≥ 7; chloride (Cl) content ≤ 250 mg/kg. Chlorine (Cl₂) ≤ 0.6 mg/kg.
- 2) Treatment to VdTUV 1466; additional requirement: O₂ ≤ 0.02 mg/l
- 3) Antifreeze on ethylene glycol basis with inhibitors. Content: > 20 % to 50 % (e.g. Antifrogen N)
- 4) No ultra-pure water! Conductivity at 25 °C: ≤ 800 μS/cm.
- 5) Mechanical seal suitable for t ≤ 110 °C
- 6) Mechanical seal suitable for t ≤ 120 °C

Example:
Given: pure water 15 °C; Q = 8 m³/h; H = 45 m

Found:

Etabloc G 25 - 20/302 G7

Material resp. design variant (as per above table) _____

Pump size (as per characteristic curve 2900 1/min) _____

Reference code (as per above table) _____

Etabloc	Ⓜ	kW	400 V ≈ A
≈ 2900 1/min ²⁾			
25-20/152	90S	1,5	3,35
25-20/222	90L	2,2	4,6
25-20/302	100L	3,0	6,3
25-20/402	112M	4,0	8,3
32-23/402 ¹⁾	112M	4,0	8,3
32-23/552 ¹⁾	112L	5,5	11,0
32-125.1/072	80a	0,75	1,8
32-125.1/112	80b	1,1	2,6
32-125.1/152	90S	1,5	3,35
32-125.1/222	90L	2,2	4,6
32-160.1/222	90L	2,2	4,6
32-160.1/302	100L	3,0	6,3
32-200.1/302	100L	3,0	6,3
32-200.1/402	112M	4,0	8,3
32-200.1/552	132Sa	5,5	11,0
32-250.1/752	132S	7,5	14,6
32-250.1/1102	160Ma	11,0	20,7
32-125/112	80b	1,1	2,6
32-125/152	90S	1,5	3,35
32-125/222	90L	2,2	4,6
32-125/302	100L	3,0	6,3
32-160/302	100L	3,0	6,3
32-160/402	112M	4,0	8,3
32-200/552	132Sa	5,5	11,0
32-200/752	132S	7,5	14,6
32-250/1102	160Ma	11,0	20,7
32-250/1502	160M	15,0	28,0
40-125/152	90S	1,5	3,35
40-125/222	90L	2,2	4,6
40-125/302	100L	3,0	6,3
40-125/402	112M	4,0	8,3
40-160/402	112M	4,0	8,3
40-160/552	132Sa	5,5	11,0
40-160/752	132S	7,5	14,6
40-200/752	132S	7,5	14,6
40-200/1102	160Ma	11,0	20,7
40-250/1102	160Ma	11,0	20,7
40-250/1502	160M	15,0	28,0
40-250/1852	160L	18,5	33,0
40-250/2202	180M	22,0	40,0
50-125/302	100L	3,0	6,3
50-125/402	112M	4,0	8,3
50-125/552	132Sa	5,5	11,0
50-125/752	132S	7,5	14,6
50-160/752	132S	7,5	14,6
50-160/1102	160Ma	11,0	20,7
50-200/1502	160M	15,0	28,0
50-200/1852	160L	18,5	33,0
50-200/2202	180M	22,0	40,0
50-250/1852	160L	18,5	33,0
50-250/2202	180M	22,0	40,0
50-250/3002	200L	30,0	54,0
50-250/3702	200L	37,0	65,0
65-125/402	112M	4,0	8,3
65-125/552	132Sa	5,5	11,0
65-125/752	132S	7,5	14,6
65-160/1102	160Ma	11,0	20,7
65-160/1502	160M	15,0	28,0
65-200/1852	160L	18,5	33,0
65-200/2202	180M	22,0	40,0
65-200/3002	200L	30,0	54,0
65-250/3002	200L	30,0	54,0
65-250/3702	200L	37,0	65,0
65-250/4502	225M	45,0	78,0
80-160/1102	160Ma	11,0	20,7
80-160/1502	160M	15,0	28,0
80-160/1852	160L	18,5	33,0
80-160/2202	180M	22,0	40,0
80-160/3002	200L	30,0	54,0
80-200/3002	200L	30,0	54,0
80-200/3702	200L	37,0	65,0
80-200/4502	225M	45,0	78,0
80-250/3002	200L	30,0	54,0
80-250/3702	200L	37,0	65,0
80-250/4502	225M	45,0	78,0
100-160/3002	200L	30,0	54,0
100-160/3702	200L	37,0	65,0
100-200/3002	200L	30,0	54,0
100-200/3702	200L	37,0	65,0
100-200/4502	225M	45,0	78,0

Etabloc	Ⓜ	kW	400 V ≈ A
≈ 1450 1/min ²⁾			
25-20/034	71b	0,37	1,15
32-125.1/024	71a	0,25	0,80
32-160.1/034	71b	0,37	1,15
32-200.1/054	80a	0,55	1,60
32-250.1/114	90S	1,1	2,8
32-250.1/154	90L	1,5	3,6
32-125/034	71b	0,37	1,15
32-160/054	80a	0,55	1,60
32-200/074	80b	0,75	2,0
32-200/114	90S	1,1	2,8
32-250/154	90L	1,5	3,6
32-250/224	100La	2,2	5,1
40-125/024	71a	0,25	0,80
40-125/034	71b	0,37	1,15
40-125/054	80a	0,55	1,6
40-160/054	80a	0,55	1,6
40-160/074	80b	0,75	2,0
40-200/114	90S	1,1	2,8
40-200/154	90L	1,5	3,6
40-250/224	100La	2,2	5,1
40-250/304	100L	3,0	6,7
40-315/304	100L	3,0	6,7
40-315/404	112M	4,0	8,8
40-315/554	132S	5,5	12,0
50-125/054	80a	0,55	1,6
50-125/074	80b	0,75	2,0
50-160/114	90S	1,1	2,8
50-160/154	90L	1,5	3,6
50-200/224	100La	2,2	5,1
50-200/304	100L	3,0	6,7
50-250/304	100L	3,0	6,7
50-250/404	112M	4,0	8,8
50-315/404	112M	4,0	8,8
50-315/554	132S	5,5	11,5
50-315/754	132M	7,5	16,0
65-125/074	80b	0,75	2,0
65-125/114	90S	1,1	2,8
65-160/114	90S	1,1	2,8
65-160/154	90L	1,5	3,6
65-160/224	100La	2,2	5,1
65-200/304	100L	3,0	6,7
65-200/404	112M	4,0	8,8
65-250/554	132S	5,5	11,5
65-315/754	132M	7,5	15,5
65-315/1104	160M	11,0	21,5
80-160/154	90L	1,5	3,6
80-160/224	100La	2,2	5,1
80-160/304	100L	3,0	6,7
80-200/404	112M	4,0	8,8
80-200/554	132S	5,5	11,5
80-250/754	132M	7,5	15,5
80-250/1104	160M	11,0	21,5
80-315/1104	160M	11,0	21,5
80-315/1504	160L	15,0	28,5
80-315/1854	180M	18,5	35,0
80-315/2204	180L	22,0	42,0
80-400/3004	200L	30,0	56,0
80-400/3704	225S	37,0	67,0
100-160/304	100L	3,0	6,7
100-160/404	112M	4,0	8,8
100-200/554	132S	5,5	11,5
100-200/754	132M	7,5	15,5
100-250/1104	160M	11,0	21,5
100-250/1504	160L	15,0	28,5
100-315/1854	180M	18,5	35,0
100-315/2204	180L	22,0	42,0
100-315/3004	200L	30,0	56,0
100-400/3004	200L	30,0	56,0
100-400/3704	225S	37,0	67,0
100-400/4504	225M	45,0	81,0
125-200/754	132M	7,5	15,5
125-200/1104	160M	11,0	21,5
125-250/1504	160L	15,0	28,5
125-250/1854	180M	18,5	35,0
125-315/3004	200L	30,0	56,0
125-315/3704	225S	37,0	67,0
125-400/3004	200L	30,0	56,0
125-400/3704	225S	37,0	67,0
125-400/4504	225M	45,0	81,0
150-200/1104	160M	11,0	21,5

Etabloc	Ⓜ	kW	400 V ≈ A
≈ 1450 1/min ²⁾			
150-250/1504	160L	15,0	28,5
150-250/1854	180M	18,5	35,0
150-250/2204	180L	22,0	42,0
150-250/3004	200L	30,0	56,0
150-315/3004	200L	30,0	56,0
150-315/3704	225S	37,0	67,0
150-315/4504	225M	45,0	81,0

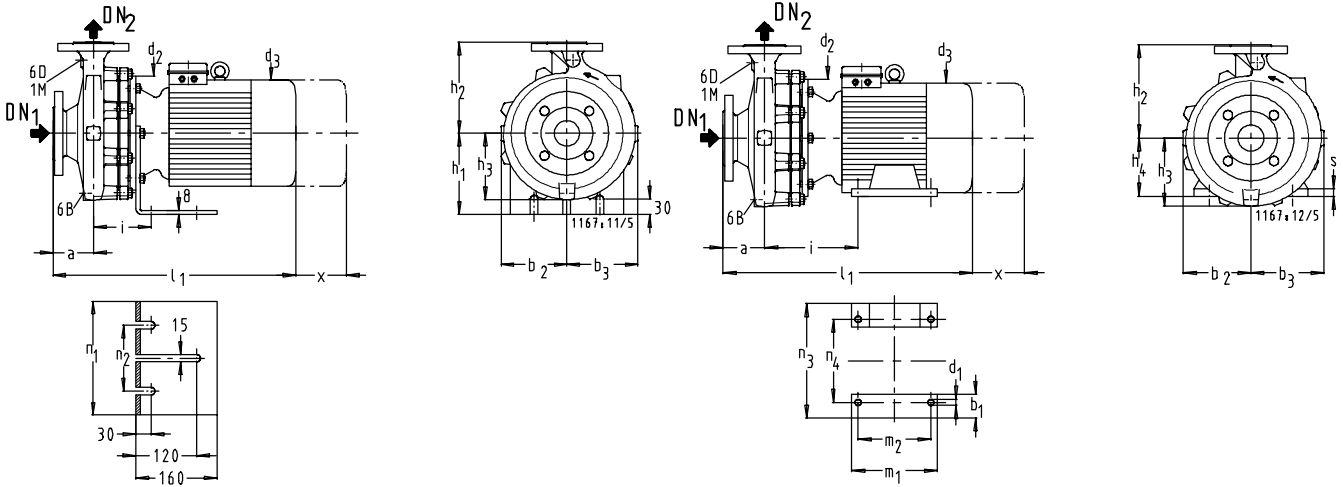
Etabloc N...ex	Ⓜ	kW	400 V ≈ A
≈ 2900 1/min ²⁾			
32-125.1/072	80a	0,75	1,76
32-125.1/132	90S	1,3	2,75
32-125.1/182	90L	1,85	3,85
32-160.1/252	100L	2,5	5,2
32-160.1/332	112M	3,3	6,9
32-200.1/462	132Sa	4,6	9,0
32-250.1/752	160Ma	7,5	13,2
32-125/132	90S	1,3	2,75
32-125/182	90L	1,85	3,85
32-125/252	100L	2,5	5,2
32-160/332	112M	3,3	6,9
32-200/462	132S	4,6	9,0
32-200/752	160Ma	7,5	13,2
40-125/182	90L	1,85	3,85
40-125/252	100L	2,5	5,2
40-125/332	112M	3,3	6,9
40-160/462	132Sa	4,6	9,0
40-160/752	160Ma	7,5	13,2
50-125/332	112M	3,3	6,9
50-125/462	132Sa	4,6	9,0
50-160/752	160Ma	7,5	13,2
65-125/462	132Sa	4,6	9,0
65-125/752	160Ma	7,5	13,2
≈ 1450 1/min			
32-200.1/054	80a	0,55	1,5
32-200.1/074	80b	0,75	2,0
32-250.1/134	90L	1,35	3,1
32-160/054	80a	0,55	1,5
32-200/074	80b	0,75	2,0
32-250/134	90L	1,35	3,1
40-125/054	80a	0,55	1,5
40-160/074	80b	0,75	2,0
40-200/134	90L	1,35	3,1
50-125/054	80a	0,55	1,5
50-125/074	80b	0,75	2,0
50-160/134	90L	1,35	3,1
65-125/074	80b	0,75	2,0
65-160/134	90L	1,35	3,1

1) zweistufig/two stages/2 étages/a due stadi/tweetraps
 2) The current values A given are guide values. For exact current values please refer to the motor nameplate.

Etabloc G, M 25-20/... - 40-250/..., n ≈ 2900 1/min

mit Stützfuß (bis Motorbaugröße 112 = 4 kW)
 mit Motorfuß (ab Motorbaugröße 132 = 5,5 kW)
 with support foot (up to motor size 112 = 4 kW)
 with motor foot (motor size 132 = 5.5 kW and above)
 avec béquille (jusqu'à taille de moteur 112 = 4 kW)

avec pied de moteur (à partir de la taille de moteur 132 = 5,5 kW)
 con piede angolare (fino alla grandezza del motore 112 = 4 kW)
 con piede di fusione (a partire della grandezza del motore 132 = 5,5 kW)
 met motorvoet (vanaf motorgrootte 132 = 5,5 kW)



1 M	Druckmeßgerät-Anschluß / Pressure gauge connection / Indicateur de pression / Manomètre / Manometro / Manometer	Rc 3/8 1)
6 B	Förderfähigkeit-Entleerung / Casing drain / Vidange du liquide pompé / Scarico del liquido convogliato / Vloeistof- aftap	Rc 3/8 1)
6 D	Förderfähigkeit-Auffüllen und Entlüften / Filling and venting of medium handled / Remplissage et purge d'air du liquide pompé / Riempimento del liquido convogliato spurgo dell'aria / Vloeistof vullen en ontluften	Rc 3/8 1)

Etabloc G, M	DN ₁ ²⁾	DN ₂ ²⁾	a	b ₁ ≈	b ₂	b ₃	d ₁	d ₂	d ₃ ≈	h ₁	h ₂	h ₃	h ₄	i	l ₁ ≈	m ₁ ≈	m ₂	n ₁	n ₂	n ₃ ≈	n ₄	s	x
25-20/152	40	25	90		140	140		215	178	150	175	140		105	436			214	130				145
25-20/222	40	25	90		140	140		215	178	150	175	140		105	461			214	130				145
25-20/302	40	25	90		140	140		215	198	150	175	140		105	486			214	130				145
25-20/402	40	25	90		140	140		215	222	150	175	140		105	507			214	130				145
32-23/402 ³⁾	40	32	122		125	135		215	222	150	175	130		80	497			214	130				
32-23/552 ³⁾	40	32	122		125	135		215	222	150	175	130		80	542			214	130				
32-125.1/072	50	32	80		113	113		225	160	160	140	103		118	426			225	130				100
32-125.1/112	50	32	80		113	113		225	160	160	140	103		118	426			225	130				100
32-125.1/152.2	50	32	80		113	113		225	178	160	140	103		118	461			225	130				100
32-125.1/152.1	50	32	80		113	113		225	178	160	140	103		118	461			225	130				100
32-125.1/222	50	32	80		113	113		225	178	160	140	103		118	461			225	130				100
32-160.1/222.2	50	32	80		116	125		225	178	160	160	115		118	461			225	130				100
32-160.1/222.1	50	32	80		116	125		225	178	160	160	115		118	461			225	130				100
32-160.1/302	50	32	80		116	125		225	198	160	160	115		118	498			225	130				100
32-200.1/302	50	32	80		128	137		275	198	160	180	130		118	498			225	130				100
32-200.1/402.2	50	32	80		128	137		275	222	160	180	130		118	513			225	130				100
32-200.1/402.1	50	32	80		128	137		275	222	160	180	130		118	513			225	130				100
32-200.1/552	50	32	80	43	128	137	12	275	265		180	130	132	192	546	180	140			250	216	15	100
32-250.1/752 ⁴⁾	50	32	100	43	164	171	12	320	265		225	162	132	198	566	180	140			250	216	15	100
32-250.1/1102 ⁴⁾	50	32	100	70	164	171	14	320	323		225	162	160	205	665	260	210			320	254	21	100
32-125/112	50	32	80		113	113		225	160	160	140	103		118	426			225	130				100
32-125/152	50	32	80		113	113		225	178	160	140	103		118	461			225	130				100
32-125/222	50	32	80		113	113		225	178	160	140	103		118	461			225	130				100
32-125/302	50	32	80		113	113		225	198	160	140	103		118	498			225	130				100
32-160/302.2	50	32	80		113	125		225	198	160	160	115		118	498			225	130				100
32-160/302.1	50	32	80		113	125		225	198	160	160	115		118	498			225	130				100
32-160/402	50	32	80		113	125		225	222	160	160	115		118	523			225	130				100
32-200/552.2 ⁴⁾	50	32	80	43	132	141	12	275	265		180	133	132	198	546	180	140			250	216	15	100
32-200/552.1 ⁴⁾	50	32	80	43	132	141	12	275	265		180	133	132	198	546	180	140			250	216	15	100
32-200/752 ⁴⁾	50	32	80	43	132	141	12	275	265		180	133	132	198	546	180	140			250	216	15	100
32-250/1102.2 ⁴⁾	50	32	100	70	170	176	14	320	323		225	168	160	205	665	260	210			320	254	21	100
32-250/1102.1 ⁴⁾	50	32	100	70	170	176	14	320	323		225	168	160	205	665	260	210			320	254	21	100
32-250/1502 ⁴⁾	50	32	100	70	170	176	14	320	323		225	168	160	205	665	260	210			320	254	21	100
40-125/152	65	40	80		113	113		225	178	160	140	103		118	461			225	130				100
40-125/222.2	65	40	80		113	113		225	178	160	140	103		118	461			225	130				100
40-125/222.1	65	40	80		113	113		225	178	160	140	103		118	461			225	130				100
40-125/302.2	65	40	80		113	113		225	198	160	140	103		118	498			225	130				100
40-125/302.1	65	40	80		113	113		225	198	160	140	103		118	498			225	130				100
40-125/402	65	40	80		113	113		225	222	160	140	103		118	523			225	130				100
40-160/402	65	40	80		115	131		225	222	160	160	118		118	523			225	130				100
40-160/552.2	65	40	80	43	115	131	12	225	265		160	118	132	198	546	180	140			250	216	15	100
40-160/552.1	65	40	80	43	115	131	12	225	265		160	118	132	198	546	180	140			250	216	15	100
40-160/752	65	40	80	43	115	131	12	225	265		160	118	132	198	546	180	140			250	216	15	100
40-200/752 ⁴⁾	65	40	100	43	140	152	12	275	265		180	140	132	198	566	180	140			250	216	15	100
40-200/1102	65	40	100	70	140	152	14	275	323		180	140	160	205	665	260	210			320	254	21	100
40-250/1102 ⁴⁾	65	40	100	70	165	178	14	320	323		225	168	160	205	665	260	210			320	254	21	100
40-250/1502.3 ⁴⁾	65	40	100	70	165	178	14	320	323		225	168	160	205	665	260	210			320	254	21	100
40-250/1502.2 ⁴⁾	65	40	100	70	165	178	14	320	323		225	168	160	205	665	260	210			320	254	21	100
40-250/1502.1 ⁴⁾	65	40	100	70	165	178	14	320	323		225	168	160	205	665	260	210			320	254	21	100
40-250/1852.2 ⁴⁾	65	40	100	70	165	178	14	320	323		225	168	160	205	808	304	254			320	254	21	100
40-250/1852.1 ⁴⁾	65	40	100	70	165	178	14	320	323		225	168	160	205	808	304	254			320	254	21	100
40-250/2202 ⁴⁾	65	40	100	75	165	178	14	320	355		225	168	180	219	749	300	241			360	279	23	100

1) Rc = ISO 7/1 2) EN 1092-2/DN.../PN 16/21/B 3) zweistufig/two stages/2 étages/a due stadi/tweetraps 4) $h_3 \geq h_4$

