VMTEC

ALTERA

HORIZONTAL MULTISTAGE PUMPS



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Stainless Steel Horizontal Multistage Pump

APPLICATIONS

- Small domestic and industrial systems / Domestic water supply
- Water distribution / pressure boosting
- Irrigation / Gardening / Sprinklers / Rainwater collection
- Industrial plants / Wash down unit
- Cooling and chilling / Heating and conditioning / Air conditioning systems
- Other various installations

FEATURES

- Compact close-coupled design, robust and rust resistant / Superior efficiency and performances
- Flexible application base plate
- Floating neck ring in AISI 304 and PTFE, Teflon
- Heavy duty oversize motor shaft
- Impellers and diffusers are made of stainless steel in order to achieve durability
- Easy maintenance
- Possibility of removing the hydraulic stack without disconnecting from the pipelines
- Strong and leak-proof motor rolling bearing fitted in the motor braket
- Pumping of clear non-loaded fluids
- Mechanical seal carbon / ceramic / EPDM

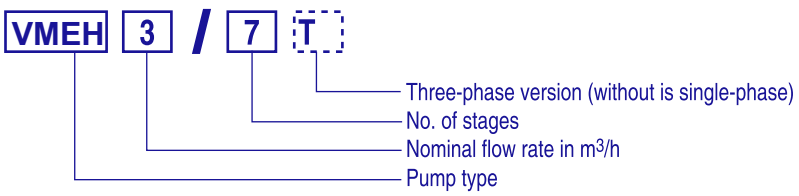
SPECIFICATIONS

- Capacities up to 14 m³/h at 50Hz
- Heads up to 11 Bar at 50Hz
- Discharge inlet 1"¼ Rp EH 3/5 - 1"½ Rp EH 9
- Discharge outlet 1" Rp EH 3/5 - 1"¼ Rp EH 9
- Maximum working pressure 10 Bar
- Maximum allowable amount of sand 50 gr/m³
- Ambient temperature range max 40°C
- Liquid temperature range -15° C to 110° C
- Maximum solids size up to 2 mm
- Asynchronous, TEFC, Class F insulation, IP55 protection motor
- Capacitor inside terminal box
- Single phase motors with built-in thermal relay
- Maximum number of starts per hour: 20

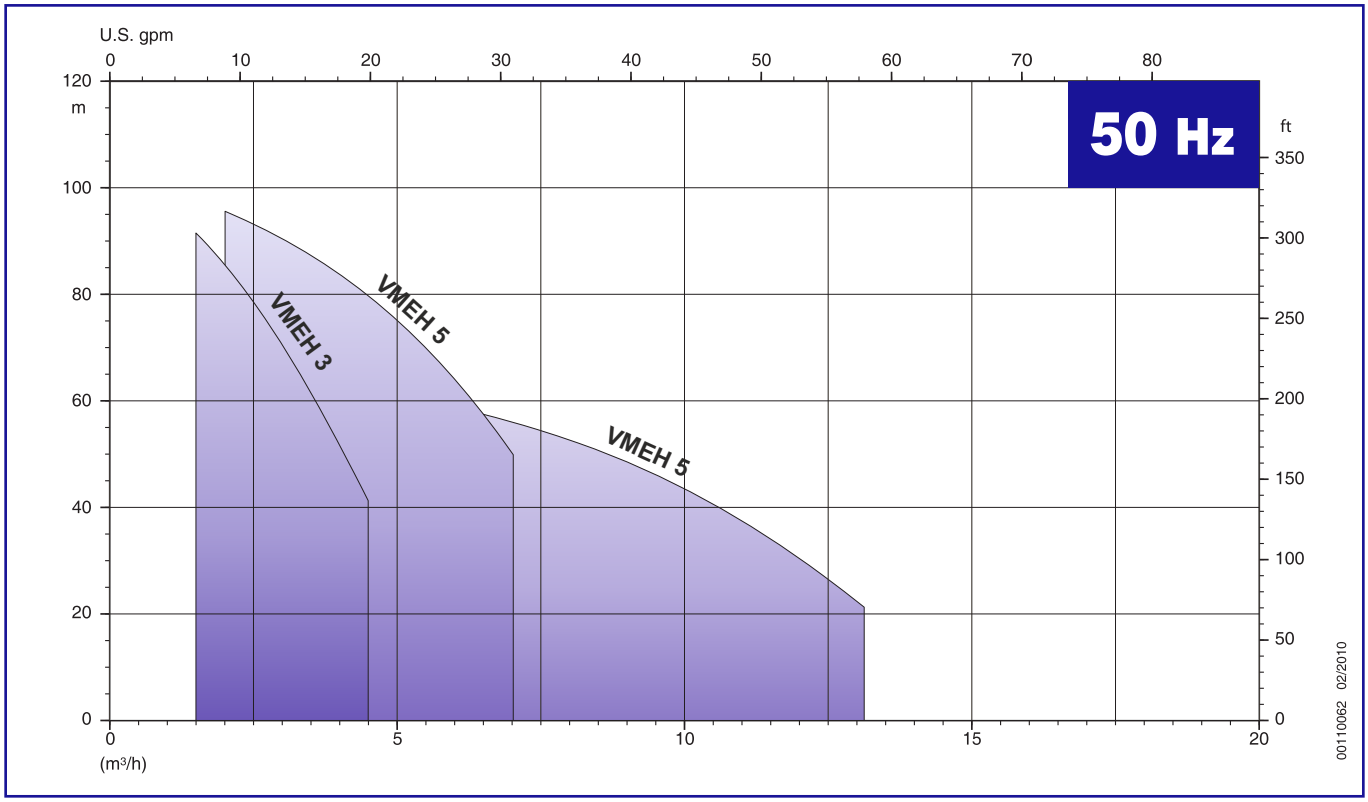
AVAILABLE ON REQUEST

- Special mechanical seal
- Discharge inlet/outlet NPT

PUMP IDENTIFICATION CODE



00117020 02/2010



MATERIAL IN CONTACT WITH THE LIQUID				
Pos.	**PARTS DESCRIPTIONS**		**MATERIAL**	
		Type	**AISI**	**DIN / EN**
20.00	Pump Casing	Stainless steel	AISI 304	1.4301
20.02	Seal housing	Stainless steel	AISI 304	1.4301
20.05	Filling and drain plug	Stainless steel	AISI 304	1.4301
30.05	O-Ring	EPDM		
30.06	Mechanical seal	Ceramic/Carbon/EPDM		
30.08	Pump shaft	Stainless steel	AISI 304	1.4301
30.09	Screws and washers	Stainless steel	AISI 304	1.4301
40.00 40.01 40.03	Diffuser/s	Stainless steel	AISI 304	1.4301
50.00 50.01	Impeller/s with spacers	Stainless steel	AISI 304	1.4301

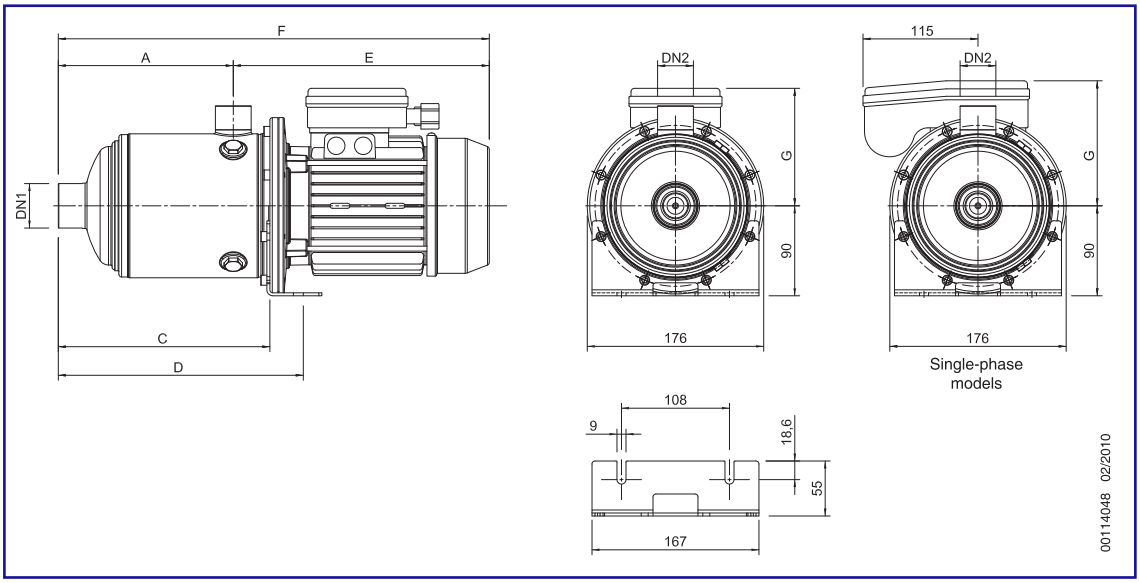
Technical data 50Hz

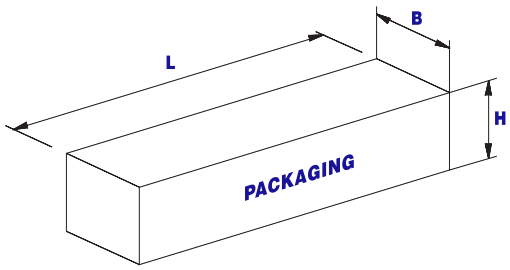
Pump model		NUMBER OF STAGES	MOTOR POWER		INPUT POWER	INTERNAL CAPACITOR		RATED CURRENT		
Single-phase 220-240V 50Hz	Three-phase 380-415V 50Hz		kW	HP	kW	µF	V	Single-phase 220-240V 50Hz	Three-phase 220-240V 50Hz	Three-phase 380-415V 50Hz
ALTERA VMEH 3/2M	ALTERA VMEH 3/2T	2	0.33	0.45	0.44	16	450	2.5	2.4	1.4
ALTERA VMEH 3/3M	ALTERA VMEH 3/3T	3	0.45	0.6	0.59	16	450	3.0	2.6	1.5
ALTERA VMEH 3/4M	ALTERA VMEH 3/4T	4	0.55	0.75	0.75	16	450	3.7	2.9	1.7
ALTERA VMEH 3/5M	ALTERA VMEH 3/5T	5	0.75	1	0.90	16	450	4.3	3.1	1.8
ALTERA VMEH 3/6M	ALTERA VMEH 3/6T	6	0.9	1.2	1.14	30	450	5.4	4.3	2.5
ALTERA VMEH 3/7M	ALTERA VMEH 3/7T	7	1.1	1.5	1.29	30	450	6.0	4.7	2.7
ALTERA VMEH 3/8M	ALTERA VMEH 3/8T	8	1.3	1.8	1.46	30	450	6.9	5.5	3.2
ALTERA VMEH 3/9M	ALTERA VMEH 3/9T	9	1.5	2	1.61	30	450	7.5	5.9	3.4

- Single-phase motors: 220-240 V ± 5 % / 50 Hz. Thermal protection built into the motor.
- Three-phase motors: 380-415 V ± 5 % / 50 Hz. Thermal protection to be provided into the starter panel by the installer.

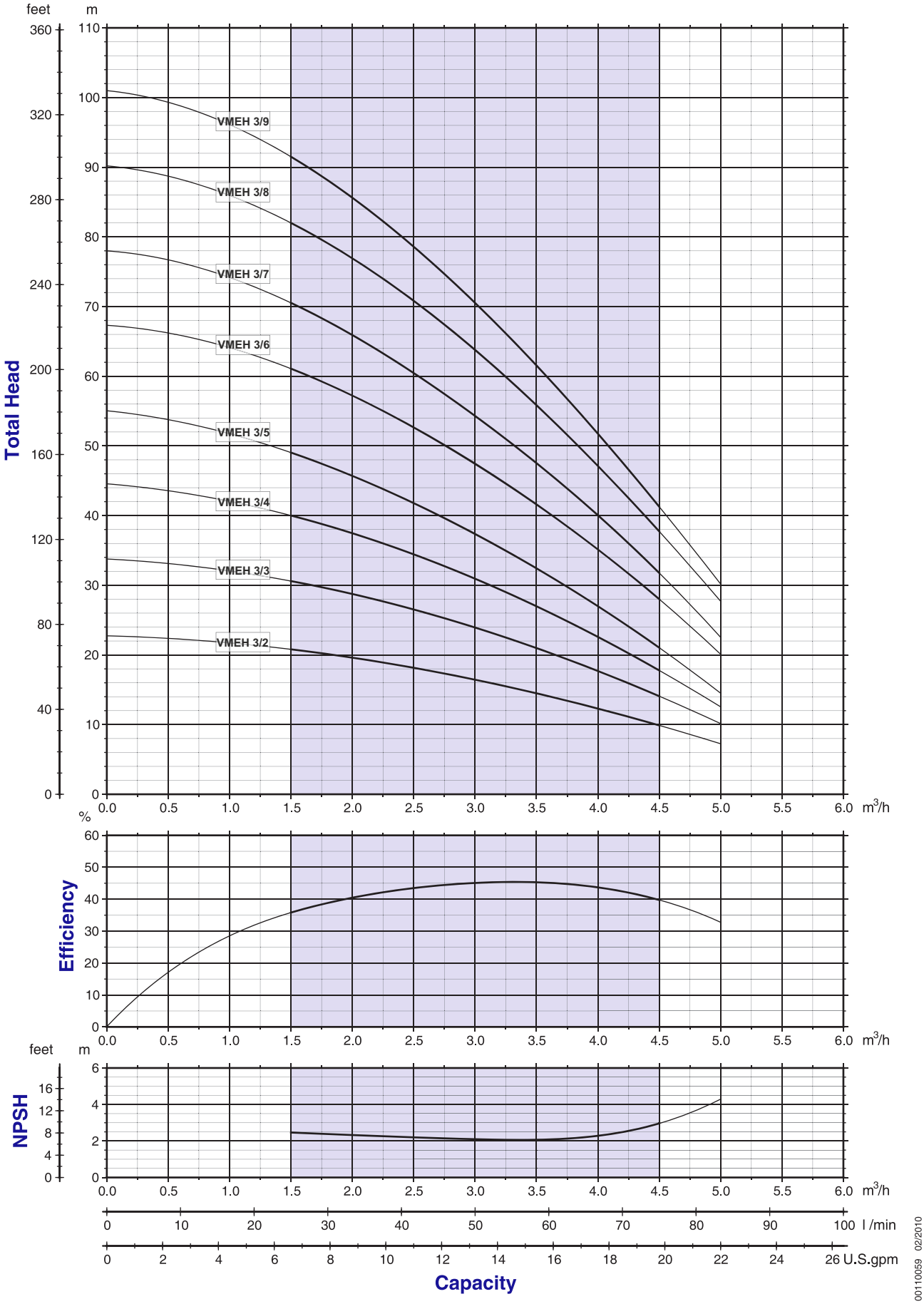
Dimensions and weights

Pump model		Dimensions									PACKAGING			
Single-phase 220-240V 50Hz	Three-phase 380-415V 50Hz	A mm	E mm	C mm	D mm	F mm	G 1-phase	G 3-phase	DN1	DN2	L mm	B mm	H mm	Weight kg
ALTERA VMEH 3/2M	ALTERA VMEH 3/2T	103	256	139.6	173	359	120	118	Rp 1"¼	Rp 1"	500	200	260	10.5
ALTERA VMEH 3/3M	ALTERA VMEH 3/3T	103	256	139.6	173	359	120	118			500	200	260	10.6
ALTERA VMEH 3/4M	ALTERA VMEH 3/4T	127	256	163.6	197	383	120	118			500	200	260	11.1
ALTERA VMEH 3/5M	ALTERA VMEH 3/5T	151	256	187.6	221	407	120	118			500	200	260	11.6
ALTERA VMEH 3/6M	ALTERA VMEH 3/6T	175	256	211.6	245	431	120	118			500	200	260	14.0
ALTERA VMEH 3/7M	ALTERA VMEH 3/7T	199	256	235.6	269	455	120	118			610	220	260	14.6
ALTERA VMEH 3/8M	ALTERA VMEH 3/8T	223	300	259.6	293	523	125	125			610	220	260	18.1
ALTERA VMEH 3/9M	ALTERA VMEH 3/9T	247	300	283.6	317	547	125	125			610	220	260	18.7





Performance curves 50Hz



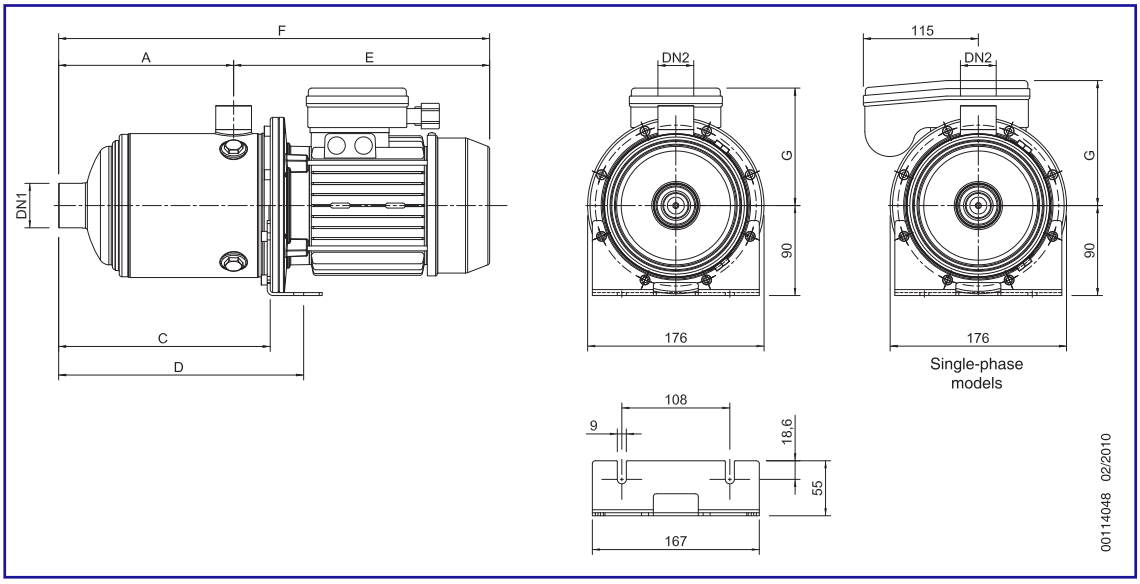
Technical data 50Hz

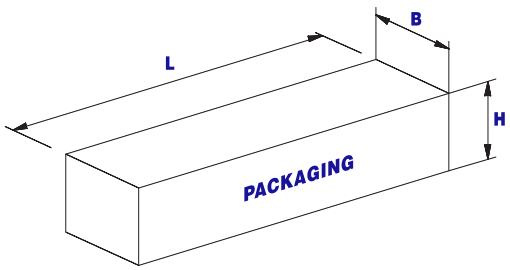
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ALTERA VMEH 5/2M	ALTERA VMEH 5/2T	2	0.45	0.6	0.58	16	450	3.0	2.6	1.5
ALTERA VMEH 5/3M	ALTERA VMEH 5/3T	3	0.55	0.75	0.80	16	450	3.9	2.9	1.7
ALTERA VMEH 5/4M	ALTERA VMEH 5/4T	4	0.9	1.2	1.10	30	450	5.3	4.3	2.5
ALTERA VMEH 5/5M	ALTERA VMEH 5/5T	5	1.1	1.5	1.33	30	450	6.2	4.7	2.7
ALTERA VMEH 5/6M	ALTERA VMEH 5/6T	6	1.3	1.8	1.56	30	450	7.3	5.7	3.3
ALTERA VMEH 5/7M	ALTERA VMEH 5/7T	7	1.5	2	1.79	30	450	8.2	6.2	3.6
ALTERA VMEH 5/8M	ALTERA VMEH 5/8T	8	1.5	2	2.00	30	450	8.9	6.6	3.8
—	ALTERA VMEH 5/9T	9	1.85	2.5	2.30	-	-	-	7.1	4.1

- Single-phase motors: 220-240 V ± 5 % / 50 Hz. Thermal protection built into the motor.
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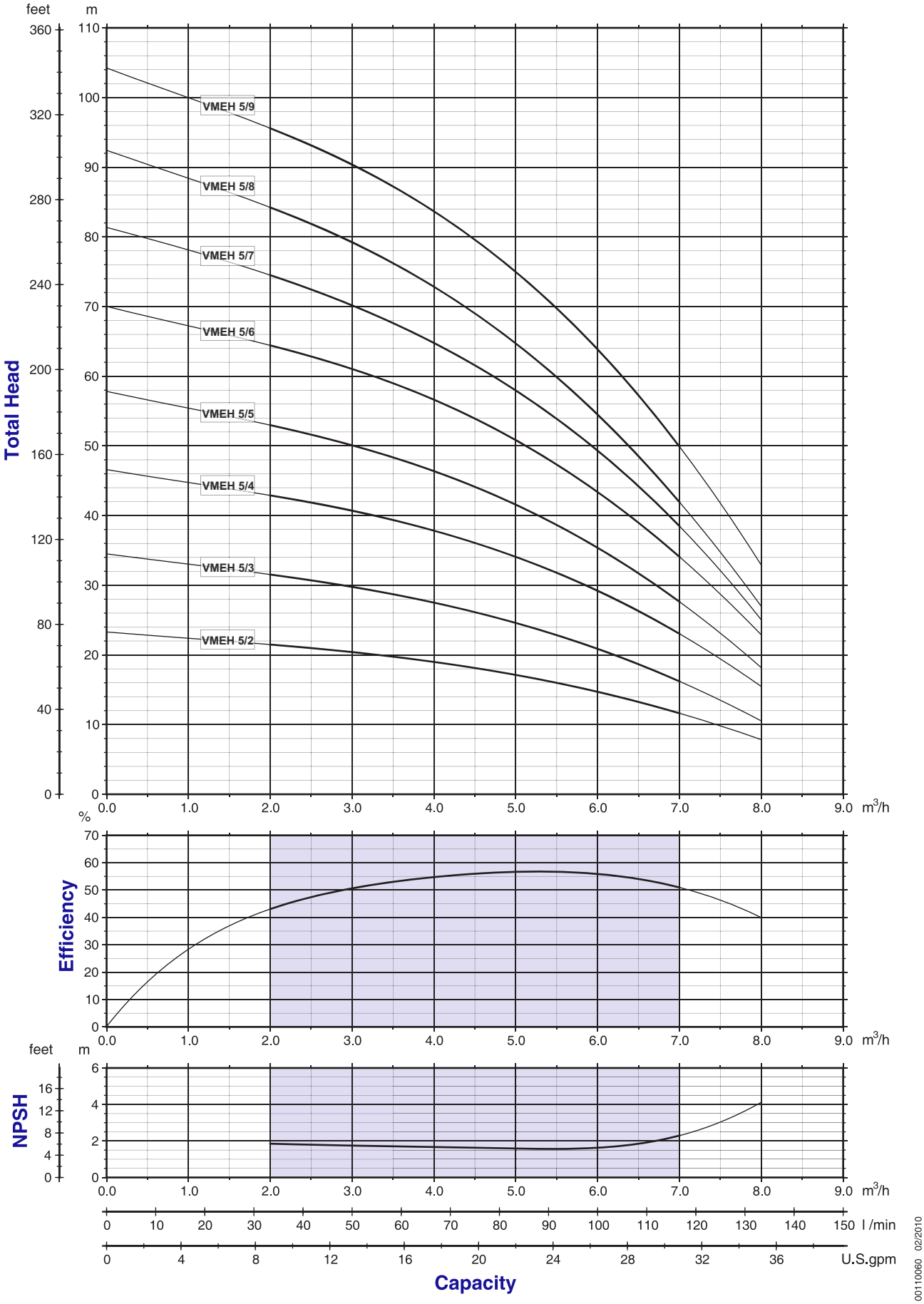
Dimensions and weights

Pump model		Dimensions									PACKAGING			
Single-phase 220-240V 50Hz	Three-phase 380-415V 50Hz	A mm	E mm	C mm	D mm	F mm	G 1-phase	G 3-phase	DN1	DN2	L mm	B mm	H mm	Weight kg
ALTERA VMEH 5/2M	ALTERA VMEH 5/2T	103	256	139.6	173	359	120	118	Rp 1"¼	Rp 1"	500	200	260	10.5
ALTERA VMEH 5/3M	ALTERA VMEH 5/3T	103	256	139.6	173	359	120	118			500	200	260	10.6
ALTERA VMEH 5/4M	ALTERA VMEH 5/4T	127	256	163.6	197	383	120	118			500	200	260	13.0
ALTERA VMEH 5/5M	ALTERA VMEH 5/5T	151	256	187.6	221	407	120	118			500	200	260	13.5
ALTERA VMEH 5/6M	ALTERA VMEH 5/6T	175	300	211.6	245	475	125	125			610	220	260	17.1
ALTERA VMEH 5/7M	ALTERA VMEH 5/7T	199	300	235.6	269	499	125	125			610	220	260	17.7
ALTERA VMEH 5/8M	ALTERA VMEH 5/8T	223	300	259.6	293	523	125	125			610	220	260	18.2
—	ALTERA VMEH 5/9T	247	300	283.6	317	547	125	125			610	220	260	18.7





Performance curves 50Hz



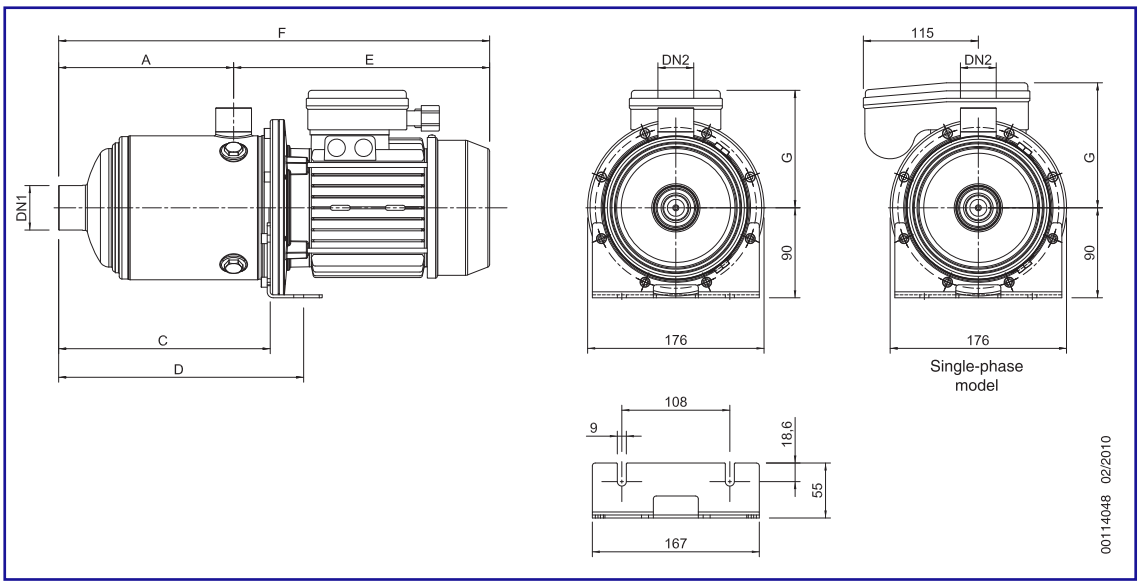
Technical data 50Hz

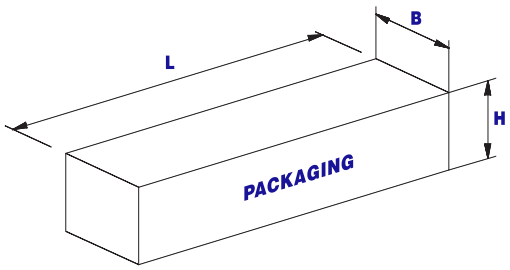
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ALTERA VMEH 5/2M	ALTERA VMEH 9/2T	2	0.75	1	0.90	16	450	4.3	3.1	1.8
ALTERA VMEH 5/3M	ALTERA VMEH 9/3T	3	1.1	1.5	1.37	30	450	6.4	4.7	2.7
ALTERA VMEH 5/4M	ALTERA VMEH 9/4T	4	1.5	2	1.77	30	450	8.2	6.1	3.5
—	ALTERA VMEH 9/5T	5	1.85	2.5	2.21	-	-	-	6.9	4.0
—	ALTERA VMEH 9/6T	6	2.2	3	2.61	-	-	-	7.8	4.5

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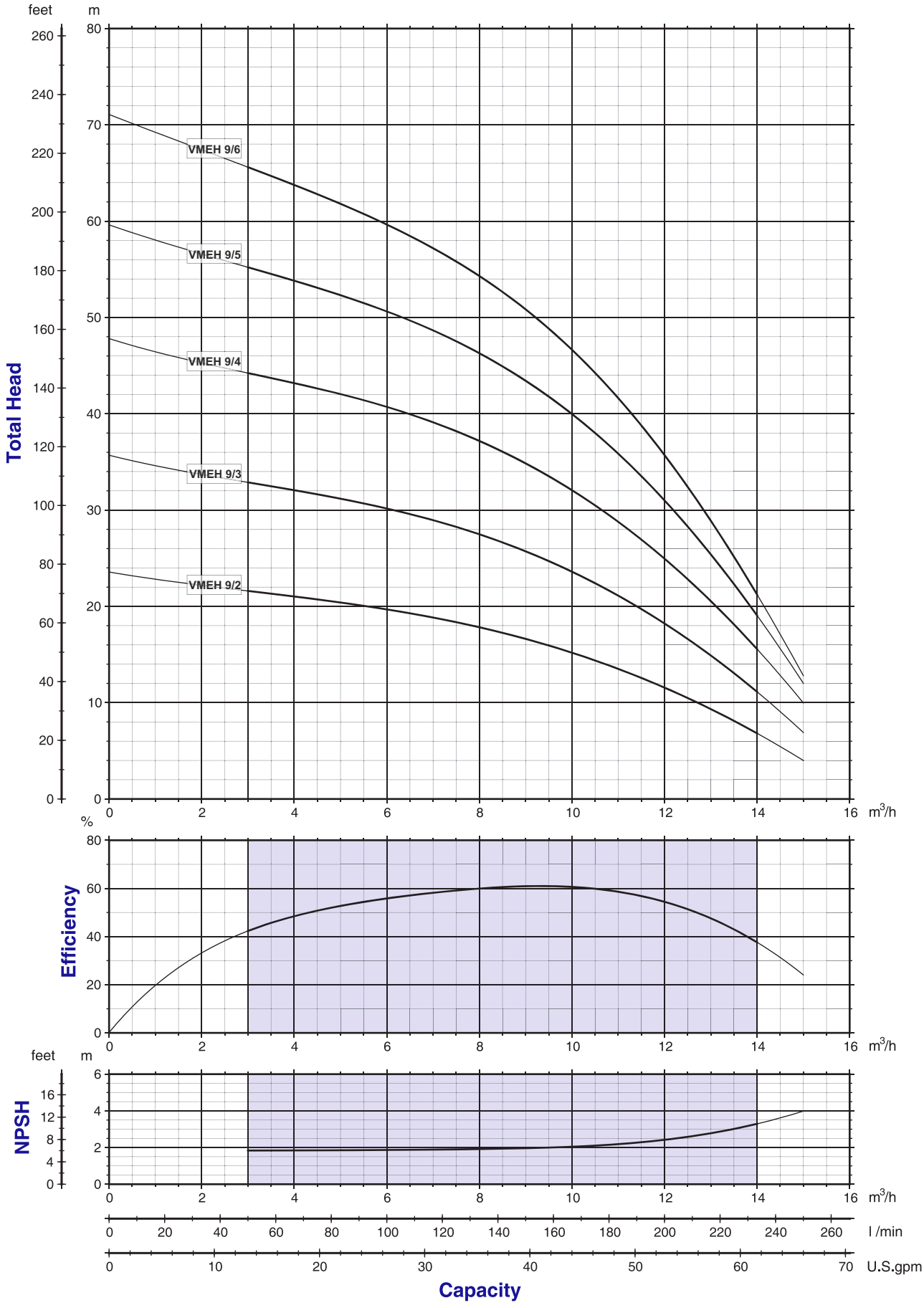
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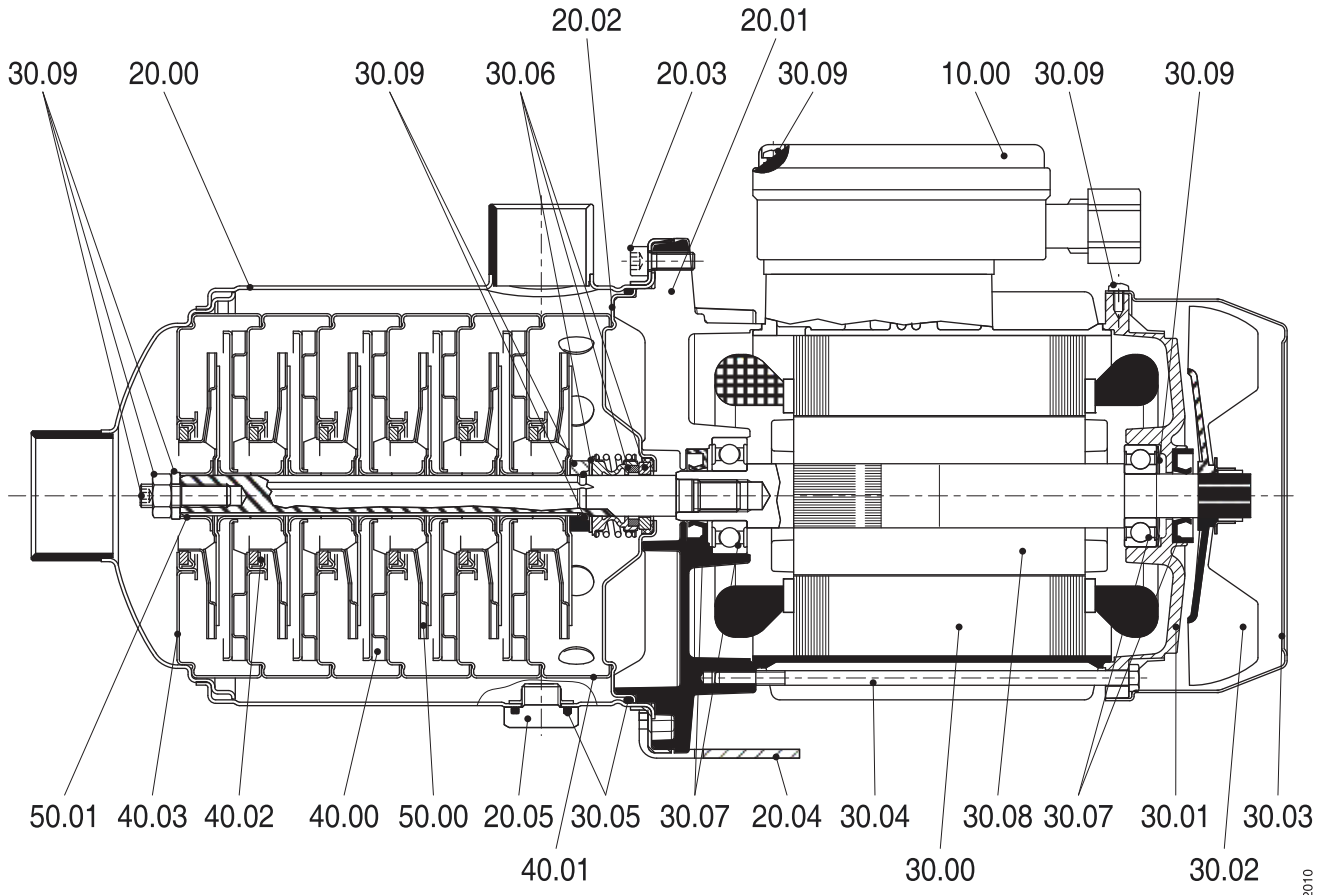
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ALTERA VMEH 5/2M	ALTERA VMEH 9/2T	118	260	158.6	192	378	120	118	Rp 1"½	Rp 1"¼	500	200	260	10.8
ALTERA VMEH 5/3M	ALTERA VMEH 9/3T	118	260	158.6	192	378	120	118			500	200	260	12.8
ALTERA VMEH 5/4M	ALTERA VMEH 9/4T	148	304	188.6	222	452	125	125			610	220	260	16.5
—	ALTERA VMEH 9/5T	178	304	218.6	252	482	125	125			610	220	260	17.2
—	ALTERA VMEH 9/6T	208	304	248.6	282	512	125	125			610	220	260	17.8





Performance curves 50Hz





Ref. N.	Description
10 00	Terminal box cover
20 00	Pump casing
20 01	Motor bracket
20 02	Seal Housing
20 03	Screws for Pump casing
20 04	Support foot
20 05	Filling and drain plug with O-Ring (2 pcs)
30 00	Motor housing and stator
30 01	Bearing housing
30 02	Fan
30 03	Fan cover
30 04	Tie rod

Ref. N.	Description
30 05	Kit O-Rings (3 pcs)
30 06	Kit mechanical seals (3 pcs)
30 07	Kit ball bearings and Lip seal (2+2 pcs)
30 08	Rotor and pump shaft
30 09	Kit screws, nut and washers
40 00	Stage housing and diffuser
40 01	Last stage with holes
40 02	Floating neck ring assembly
40 03	Initial stage housing
50 00	Impeller
50 01	Impeller spacers (2 pcs)

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