

## 8.1 Technical data

Alfa Laval ref. 558168, rev 0

Units according to ISO Standard.

The manufacturer reserves the right to change specifications without notice.

<b>Product number</b>	881241-08-14	
<b>Separator type</b>	MAB 104B-14/24	
<b>Purpose</b>	Continuous purification of mineral oil from solid particles and water. The flash point of the oil to be separated must be minimum 60 °C.	
<b>Hydraulic capacity</b>	Maximum 2.0 m <sup>3</sup> /h	
<b>Max. density of sediment</b>	1600 kg/m <sup>3</sup>	
<b>Max. density of feed</b>	991 kg/m <sup>3</sup> , (mechanical safety max. 1100 kg/m <sup>3</sup> )	
<b>Feed temperature</b>	Minimum 0 °C Maximum +100 °C	
<b>Ambient temperature</b>	Minimum +5 °C Maximum +55 °C	
<b>Motor (with pump)</b>	4-pole 1.5 kW standard motor, 50 or 60 Hz, 3-phase. Direct on-line start.  If Y/D-start is used maximum 5 seconds in Y position.	
<b>Motor (without pump)</b>	4-pole 1.1 kW standard motor, 50 or 60 Hz, 3-phase. Direct on-line start.  If Y/D-start is used maximum 5 seconds in Y position.	
<b>Power consumption</b>	idling	0.5 kW
	running (at max. capacity)	1.8 kW
	(at starting-up)	1.3 kW

**Speed**

The prescribed speed of the bowl spindle which must not be exceeded, is stamped on the name plate of the machine.

Gear ratio	50:10	49:12
Maximum speed of rotation, rpm	50 Hz	60 Hz
Motor shaft speed	1500	1800
Revolution counter speed	79 - 83	95 - 100
Bowl speed	7500	7350

**Starting time**

2 - 3 minutes

**Stopping time**

Running down with brake applied min. 1.4 minutes  
max. 3.0 minutes  
without brake 9 minutes (average)

**Maximum running time without flow**

empty bowl 480 minutes  
filled bowl 480 minutes

**Inlet pump, built-on**

Capacity:	50 Hz	60 Hz
Pump type 534391-82	2.15 m <sup>3</sup> /h	2.58 m <sup>3</sup> /h
Pump type 534391-83	1.08 m <sup>3</sup> /h	1.30 m <sup>3</sup> /h
Suction lift	Max. 4 m wg (manometric)	
Delivery head	Max. 15 m wg (manometric)	

**Outlet pump, built-on**

Capacity:	50 Hz	60 Hz
Pump type 534391-82	2.38 m <sup>3</sup> /h	2.86 m <sup>3</sup> /h
Pump type 534391-83	1.19 m <sup>3</sup> /h	1.43 m <sup>3</sup> /h
Delivery head	15 - 25 m wg (depending on flow and viscosity)	

**Sludge and water space volume**

1.26 litres

**Required water quality**

Fresh water

**Lubrication**

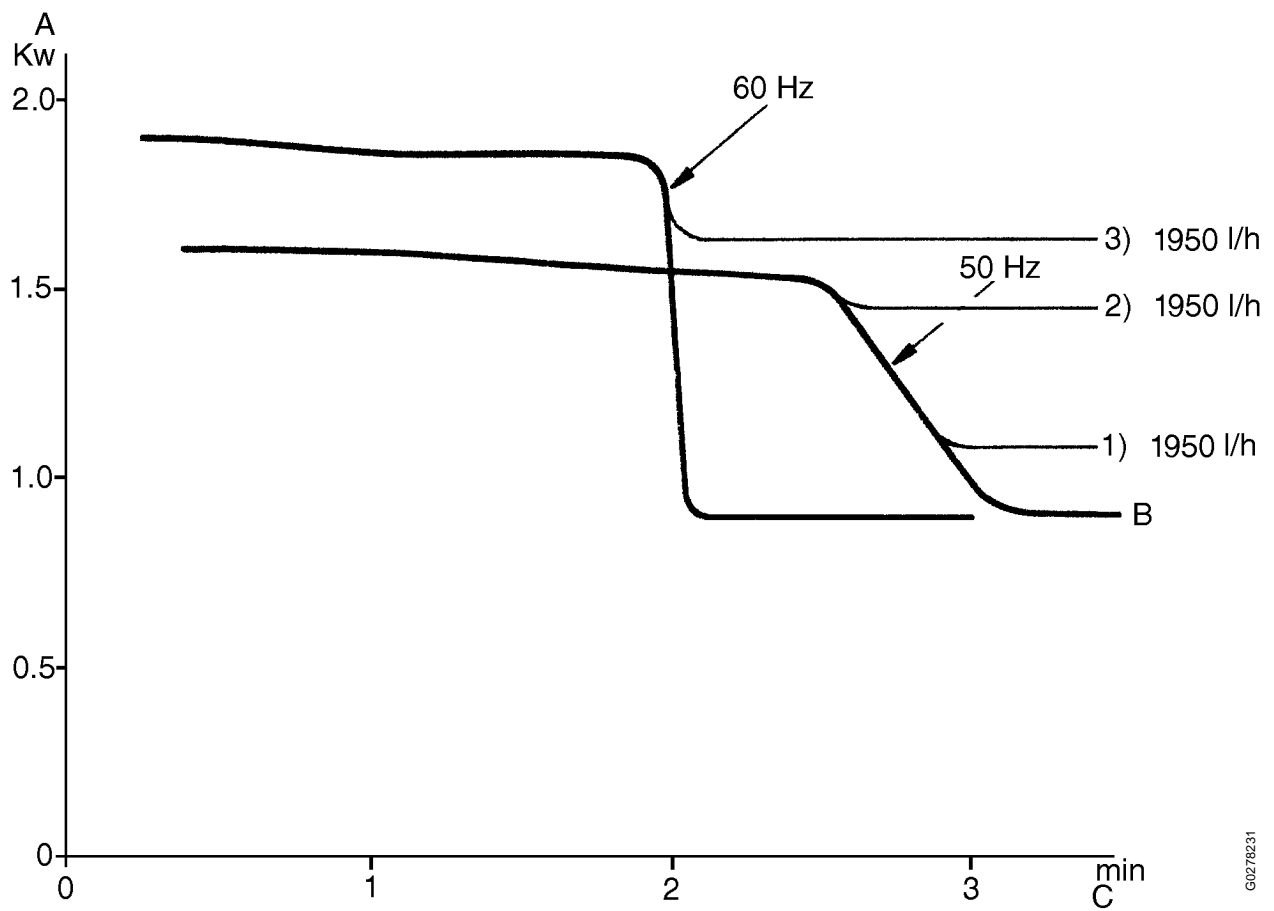
see "8.7.1 Lubrication chart, general" on page 135.

**Lubricating oil volume**

0.8 litres

<b>Weight</b>	Separator without motor	Net weight approx. 149 kg
	Motor	Approx. 16 kg
	Complete bowl	Approx. 25 kg
<b>Shipping data</b>	According to "Basic equipment"	
	Weight	280 kg gross
	Volume	0.79 m <sup>3</sup>
<b>Sound power level</b>	9.3 bel(A) ISO 3744	
<b>Sound pressure level</b>	78 dB(A) ISO 3744	
<b>Vibration level</b>	Max. for separator in use	9 mm/s (RMS)
<b>Materials</b>	Bowl spindle, lock ring	steel
	Frame, lower and upper parts	cast iron ("centriblue" finish <sup>1</sup> )
	Collecting cover	silumin (grey finish <sup>1</sup> )
	Bowl body and hood, disc stack, gravity disc	stainless steel
	Other bowl parts	brass
	Other inlet and outlet parts	stainless steel, brass, cast iron

<sup>1</sup>)An epoxy enamel



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Power consumption at start-up, power input vs time

- |                        |   |
|------------------------|---|
| A. Power input (kW)    | 1) Feed pump -20 kPa (-0.2 bar) ; Outlet pump 0 kPa (0 bar)     |
| B. Idling              | 2) Feed pump -40 kPa (-0.4 bar) ; Outlet pump 150 kPa (1.5 bar) |
| C. Start-up time (min) | 3) Feed pump -20 kPa (-0.2 bar) ; Outlet pump 250 kPa (2.5 bar) |