

Technical Data, Measures and Adjusting Values

Job No.

20-0

Change: x

Engine Cooling

Model	OM 636	* OM 621
The distance of fan from radiator core should be	approx. 12-14 mm	a = 20 mm b = 14 mm
Distance of impeller from flange of water pump	31.5 ± 0.2	23 ± 0.2
V-belt tension for V-belts, water pump generator and crankshaft (also see Job No. 20-5, Paragraph A and B)	Deflection with moderate thumb pressure: approx. 6 mm	5-10 mm
V-belt tension for V-belts, pulley, fan bracket and crankshaft (also see Job No. 20-5, Paragraph A).	approx. 10-15 mm	-

* (see Figure 20-5/2)

Cooling water thermostat specifications for testing

at a pressure of 1.5 atm.

Type	Model	Part No.	Design ¹⁾	Opening begin ²⁾ at °C	Working stroke of valve		Flow rate in lit./min. at 1 atm., 15-20 °C and with closed valve
					in mm	at °C	
OM 636	636.915 636.916 636.918 636.931	000 203 24 75	D	77-80	8	87-88	0,7-1,2
			D	71-74 77-80	8	80-81 87-88	
	636.930	181 203 00 75 181 203 01 75 636 203 00 75 000 203 97 75 000 203 98 75 001 203 19 75 001 203 20 75	W	78-79	8-9	91-94	
			W				
			W				
636.919 636.934	000 203 65 75	W	78-79	8-9	91-94		
OM 621	621.910	001 203 08 75 001 203 23 75	W W	78-79	8-9	91-94	

¹⁾ D = vapour pressure thermostat (sensitive to pressure) W = wax thermostat (not sensitive to pressure)

x ²⁾ For faster attaining of the operating temperature and the resulting improved heating capacity of the heating system during winter operation, a cooling water regulating element can be installed which opens at a cooling water temperature of 87 °C only.

This so-called winter cooling water thermostat is available from our Spare Parts Department Untertürkheim; it must be removed again in spring to prevent overheating of engine during summer operation.

Type	for type designation	Over-Pressure relief valve		Under-pressure valve opening pressure atm.
		Version	Opening pressure atm.	
OM 636	636.912, 914, 915, 916, 918 and 931	ball	0.25	0.1
	636.917, 919, 930, 932 933, 934 and 936	Renk	0.4	0.1
OM 621	621.910	Renk	0.95-1.15	0.1

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Water Pump Test Values x

Water pump for model	measured at r. p. m.	Rate of delivery, min.		Delivery head, min.	
		without throttle and free discharge kg/sec.	with throttle kg/sec.	without throttle and free discharge m	with throttle m
OM 636	4500	3.0	1.3	4.8	8.3
OM 621	2000	1.5	0.9	1.8	1.9
	3500	3.0	1.8	4.3	4.9
	5000	4.0	2.75	6.8	10.5