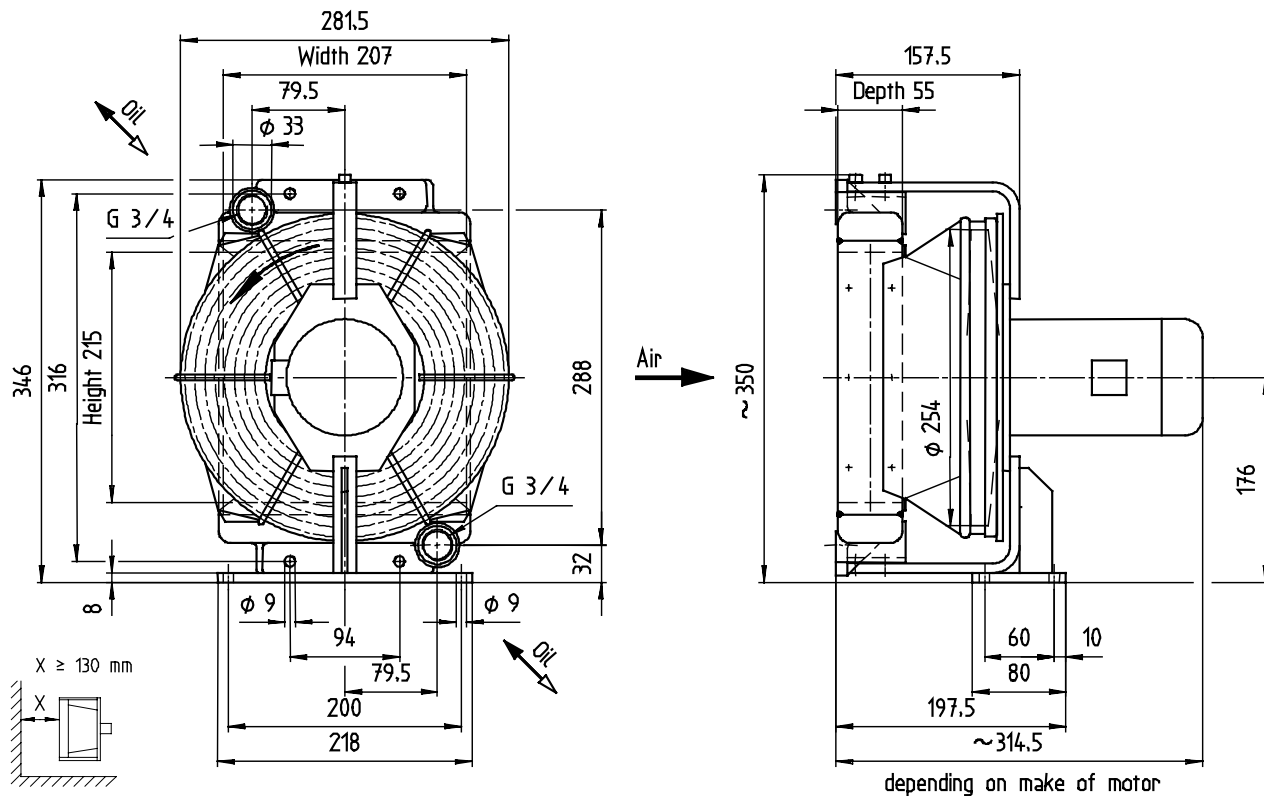


Technical data	Oil / Air Cooling Unit 2.71□□.2.2□ - 0045	Size 0045 AC
		Issue 2000



At surface temperatures of more than 80°C, protection against accidental contact should be guaranteed in the working area

Details are subject to modification without notice!

Application	Cooling of oil, HFA,HFB, HFC, HFD - fluids up to $v \approx 100 \cdot 10^{-6} \text{ m}^2/\text{s}$ ( $\hat{=} 100 \text{ cSt}$ ), Water/Glycol 65:35, no water without corrosion preventive (min. 2 %). Cooling medium: Air			
Technical data	Type	2.71□□.2. -	02 - 0045	01 - 0045
	Face area	m <sup>2</sup>	0,045	0,045
	Fan speed	1/min	3000	1500
	Fan load	kW	0,2	0,02
	Air flow	kg/s	0,29	0,12
	Noise level 1 m	dB(A)	79	63
	Noise level 7 m	dB(A)	~ 66	~ 51
	Motor power	kW	0,25	0,18
	Motor frame size		IM B14 C90 - 63	IM B14 C90 - 63
	Total weight with motor	kg	11,3	11,3
Weight without motor	kg	5,6	5,6	
Oil content	l	1,5	1,5	
Max. working pressure	16 bar			
Max. working temp.	Oil and hydraulic fluids 120 °C, water/glycol, emulsion 90 °C With explosion-proof motor oil 100 °C, hydraulic fluids 90 °C			
Material	Cooler: Aluminium	Fan shroud: Steel (zinc plated)		
	Fan: Plastic	Other parts: Steel (zinc plated)		
Installation instruction	Refer to: Type sheet, operation instructions Ensure there is an unhindered flow of air to and from the cooler. Provide ventilation and exhaust in room where cooler is installed. Avoid a pulsating oil flow and pressure surges.			
Type key	<div style="text-align: center;"> <span style="border: 1px solid black; padding: 2px;">2</span> . <span style="border: 1px solid black; padding: 2px;">7</span> <span style="border: 1px solid black; padding: 2px;">1</span> <span style="border: 1px solid black; padding: 2px;"> </span> <span style="border: 1px solid black; padding: 2px;"> </span> . <span style="border: 1px solid black; padding: 2px;">2</span> . <span style="border: 1px solid black; padding: 2px;"> </span> <span style="border: 1px solid black; padding: 2px;"> </span> - <span style="border: 1px solid black; padding: 2px;">0</span> <span style="border: 1px solid black; padding: 2px;">0</span> <span style="border: 1px solid black; padding: 2px;">4</span> <span style="border: 1px solid black; padding: 2px;">5</span> </div> <div style="margin-top: 10px;"> <span style="float: right;">Face area</span> <span style="float: right;">Type of fan drive and fan speed</span> <span style="float: right;">Number of passes (normal: 1, for low oil flows: 3)</span> </div>			
Performance	see overleaf			

Size 0045 AC

Oil / Air Cooling Unit  
2.711.2.01 - 0045

Performance

**Introduction**

Following data are known:

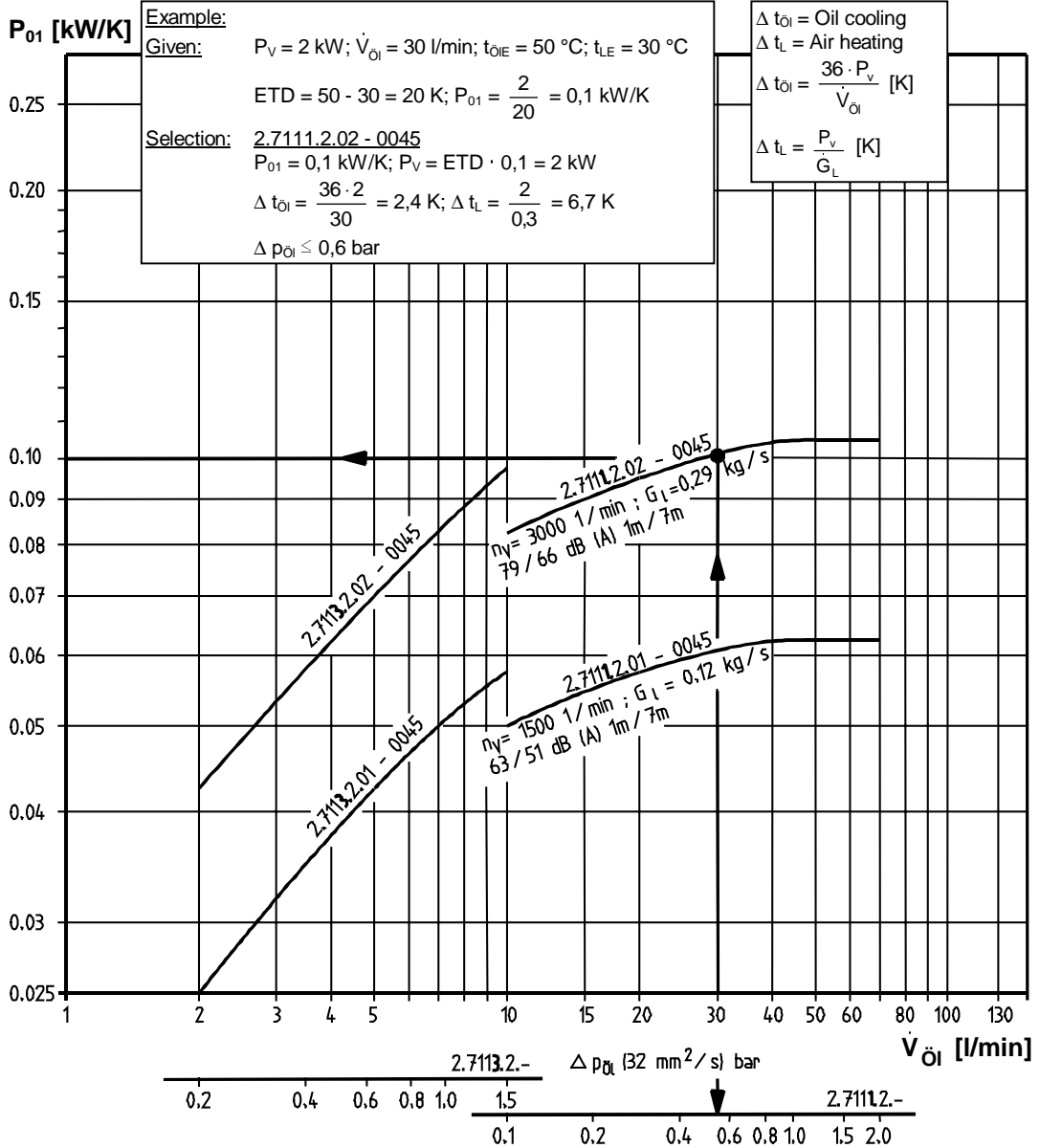
Dissipation loss  $P_V$  [kW]  
 Oil flow  $\dot{V}_{Oil}$  [l/min]  
 Max. perm. oil temperature  $t_{OIE}$  [°C]  
 Cooling air temperature  $t_{LE}$  [°C]

From the following can be calculated:

Entry - Temperature - Difference  
 $ETD = t_{OIE} - t_{LE}$  [K]  
 Specific cooling capacity with ETD = 1 K  
 $P_{01} = \frac{P_V}{ETD}$  [kW/K]

In hydraulic systems, the dissipation loss is approximately 20 – 25 % of drive power

**Performance diagrams**



**$\Delta p_{O1}$  - Correction**

The  $\Delta p$ -value obtained from the curves applies for  $v = 32$  mm<sup>2</sup>/s ( $\hat{=} 32$  cSt).  
 For differing viscosities, the  $\Delta p$ -value has to be multiplied by the factor f.

10	15	20	24	32	40	50	60	80	mm <sup>2</sup> /s
0,65	0,75	0,8	0,9	1,0	1,1	1,2	1,3	1,5	f

