

# ORA

## Oil industrial chiller

Oil cooling is indispensable in a variety of applications:

- machine tools: to control the temperature of the hydraulic oil or spindle oil, preventing deformation and resulting in better surface finish and accuracy of the finished product
- chip-removing machines: Cooling of the cutting oil improves the life of the machine tool and allows a better surface finish of the final product.
- in presence of oleodynamic circuits.

Thanks to their configurability and high thermodynamic performance, ORA oil chillers can perfectly meet the requirements of these industrial applications.

## Main Features

- Cooling capacity between 2 and 16 kW
- Refrigerant fluid R134a (2÷4kW); R407C (6÷16kW)
- Non-ferrous hydraulic circuit and stainless steel plate evaporator to preserve oil quality
- Microprocessor control programmable with proprietary software
- piston or scroll compressors
- Fully configurable units with numerous options and accessories
- Compact design suitable for installation in small spaces close to the machine tool
- Structure designed for handling by eyebolts
- Axial fans with speed control (optional)
- 10 bar gear pump (optional)
- Zero oil pressure gauge – 25 bar in glycerine
- Automatic hydraulic bypass valve set at 10 bar
- The structure and design ensure complete accessibility to internal components for easy maintenance

## Available Versions

- Direct exchange version with plate evaporator
- Direct exchange version with plate evaporator and gear pump
- ORA Process Chillers do not fall under the applicability of the regulations MT (Medium Temperature – EU 2015/1095) and HT (High Temperature – EU 2016/2281)
- Working range of the chilled fluid: +13°C ÷ +30°C



## ORA20-34-43-58-70



CODE	M.U.	ORA20	ORA34	ORA43	ORA58	ORA70
Cooling capacity (1)	W	2100	3400	4300	5800	7000
Absorbed power (2)	W	600	1200	1300	1500	1900
Refrigerant Gas		R134a	R134a	R134a	R407C	R407C
Refrigerant Gas charge	kg	0.7	1.1	0.8	2.0	2.2
Cooling circuits/Compressors	N°	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Power Supply	V-Hz	400-3-50 (460-3-60)	400-3-50 (460-3-60)	400-3-50 (460-3-60)	400-3-50 (460-3-60)	400-3-50 (460-3-60)
Auxiliaries feed	VAC	230 (24)	230 (24)	24	24	24
Connections		Morsettiera				
Fan Type/N°		Assiale /1				
Condenser fan air flow (free)	m³/h	1200	1800	1800	4100	4100
Total fan absorbed power	W	150	90	90	160	160
Hydraulic connections	Ø	½"	¾"	¾"	¾"	¾"
Noise Level (3)	dB(A)	44	45	45	48	52
Height x Width x Depth	mm	720x420x580	1146x570x740	1146x570x740	1146x570x740	1146x570x740
Shipping weight	kg	80	100	115	115	52

OPTIONAL PUMP	M.U.	ORA20	ORA34	ORA43	ORA58	ORA70
Pump absorbed power	W	370	370	370	550	550
Nominal flow	l / min	8.5	16	16	25	25
Available nom. head	bar	10	10	10	10	10

(1) Referred to oil ISO VG 32 at conditions inlet/outlet Temperature 38/30°C, ambient 32°C

(2) Referred to the compressor only at the following conditions: oil Temperature inlet/outlet 38/30°C, ambient Temperature 32°C

(3) Sound pressure level referred to free field at distance of 10m EN ISO 9614-2

## ORA95-A3-A6



CODE	M.U.	ORA95	ORAA3	ORAA6
Cooling capacity (1)	W	10000	13000	16000
Absorbed power (2)	W	2600	3200	4100
Refrigerant Gas		R407C	R407C	R407C
Refrigerant Gas charge	kg	3,0	4,5	4,1
Cooling circuits/Compressors	N°	1 / 1	1 / 1	1 / 1
Power Supply	V-Hz	400-3-50 (460-3-60)	400-3-50 (460-3-60)	400-3-50 (460-3-60)
Auxiliaries feed	VAC	24	24	24
Connections			Morsettiera	
Fan Type/N°			Assiale /1	
Condenser fan air flow (free)	m³/h	9700	9700	9700
Total fan absorbed power	W	780	780	780
Hydraulic connections	Ø	1"	1"	1"
Noise Level (3)	dB(A)	58	58	62
Height x Width x Depth	mm	1500x735x926	1500x735x926	1500x735x926
Shipping weight	kg	200	220	250

OPTIONAL PUMP	M.U.	ORA95	ORAA3	ORAA6
Pump absorbed power	W	750	1500	1500
Nominal flow	L/min	38	50	50
Available nom. head	bar	10	10	10

(1) Referred to oil ISO VG 32 at conditions inlet/outlet Temperature 38/30°C, ambient 32°C

(2) Referred to the compressor only at the following conditions: oil Temperature inlet/outlet 38/30°C, ambient Temperature 32°C

(3) Sound pressure level referred to free field at distance of 10m EN ISO 9614-2