



Solutions for Air Cooled Condensers



Our philosophy

Solutions for an evolving industry

In the global marketplace, our customers, investors, partners value our products and services for two reasons: excellence and reliability. In Rossi S.p.A., a company of the Habasit Group, we have made of change a strategic lever for our growth. "Solutions for an evolving industry" fully expresses our corporate philosophy: we are a flexible and dynamic reality, able to satisfy all requirements of a continuously evolving industrial world thanks to our innovative solutions.

Cutting-edge manufacturing

When it comes to high-performance and ground precision gear manufacturing, technology and experience are everything. Cutting-edge technology without experience can limit the benefit the final product has for the end user which is why we continue to take pride of our work. Cutting-edge technology can be bought, but how you control it is earned through experience.

Specialized housing machining

High performance needs to be supported with important equipment and knowledge. For this reason, we dedicate special attention to machining all components, including housings for big sizes. High quality standard requirements can be reached using cutting-edge technology.

Test controls

Systematic, extensive controls on every stage of the process (from materials to final controls under load using computerized brakes at the end of the assembly line) and their productivity allow quality to be produced and not just achieved through selection, and permit monitoring and improving the process itself. In addition customers can trust our solutions which have been fully tested and run in our testing room, being operationally certified before on site commissioning.

Solutions for Air Cooled Condensers

Dedicated gear units for Air Cooled Condensers

Main benefits:

- Helical gearboxes in vertical mounting position
- Sizes: 250, 280, 320 and 360
- High reliability, AGMA service factor > 2 according to CTI 167
- Long life, bearings calculated life time > 100 000 h according to CTI 167
- Electric motor bolted bell housing with axial fan and heat exchanger for gearbox cooling
- Integrated foot mounted housing
- Patented lubrication circuit: no pressure, with slave pump, reduced oil quantity, and all oil bathed bearings
- Possibility of bidirectional oil slave pump
- Possibility of cold starting from to -15 °C and oil temperature pre-heating
- Lower output bearing protected with dry well solutions

Main power generation applications:

- Biomass power plants
- Gas-fired power plants
- Waste incineration plants
- Oil-fired power plants

Technical features overview

Sizes		250		280		32	20	360		
	n ₁		M _{N2}		M _{N2}		M _{N2}		M _{N2}	
	[min ⁻¹]		[Nm]		[Nm]		[Nm]		[Nm]	
	1 0 0 0	10,7	29 000	- 10,4	46 200	9,95	56 000		-	
10 -	1200		29 000		-		56 000	10,7 -		
	1 500		29 000		-					
	1800		28 000		-		-		-	
	1 0 0 0	- 11,8	25 000	- 11,9	41 200	11,1	58 000	11,8	-	
11 つ	1 200		24 300		40 000		58 000		-	
11,2	1 500		24 300		40 000		58 000		-	
	1800		24 300		-		-		-	
	1 0 0 0		22 400	- 13,3	40 000	12,9	51 500	13,1	-	
12,5	1 200	13,0	21 800		40 000		50 000		-	
12,3	1 500	13,0	21 800		40 000		48 700		-	
	1800		21 200		-		48 700		-	
14	1 0 0 0	- 14,5	22 400	- 14,7	33 500	14,3	48 700	14,4	75 000	
	1200		22 400		33 500		48 700		73 000	
	1 500		21 800		34 500		47 500			
	1800		21 800		33 500		46 200		-	
	1 0 0 0	- 16,7	26 500	- 15,7	41 200	15,9	50 000	16,0	71 000	
16	1 200		25 700		41 200		48 700		71 000	
10	1 500		25 700		41 200		48 700			
	1800		25 000		40 000		47 500		-	
	1 0 0 0	- 18,4	25 700	- 17,9	41 200	17,8	56 000	18,3	69 000	
18	1 200		25 000		41 200		54 500		69 000	
	1 500		25 000		41 200		54 500		67 000	
	1800		25 000		40 000		53 000		-	
	1 0 0 0	20,4	22 400		41 200	20,6	53 000	20,3	73 000	
20	1 200		22 400	20,1	40 000		51 500		73 000	
20	1 500	20,1	22 400	20,1	38 700		51 500		71 000	
	1800		23 600		40 000		50 000		71 000	
22,4	1000		23 000		38 700		51 500		61 500	
	1200	22,7	22 400	22,0	34 500	22,8	50 000	23,4	61 500	
, .	1 500		22 400		34 500	,0	50 000	,	61 500	
	1 800		22 400		33 500		48 700		60 000	
	1000		17 500		40 000		51 500	25,7	63 000	
25	1 200	1 500	17 000	- 24,6	35 500	25,0	50 000		61 500	
	1 500		17 000		34 500		50 000		60 000	
	1800		16 500		34 500		48 700		60 000	

Nominal output torques [Nm] according to CTI 167

Rossi reserves the right for alterations. To assist in your planning, we recommend that you call your Rossi representative.

Integrated Iubrication circuit with slave pump

Buttom oil tank suitable for easy pump maintenance

Special output shaft length according to customer requirements



Top cover with air flow conveyor

R

Foot mounted single piece housing with cooling wings

External output support integrated in gearbox housing Pressure free lubrication system. Two oil sumps always grant perfect bearing lubrication in any condition (even with low oil temperature).

Technical features overview

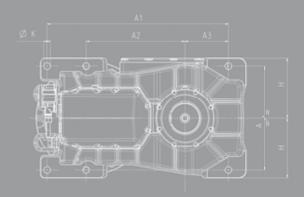
Gearbox dimensions																
Size	а	Α	A1	A2	A3	С	С	f	h	н	ØK	L	R	R1	W2	Mass
							[max]									[kg]
250	430	510	/	530	225	616,5	800	286	218	300	33 (x4)	51	675	958	1045	950
280	480	580	/	540	220	604	800	305	204	335	33 (x4)	42	652	934	1118	1070
320	545	610	1065	580	255	725	1000	359	303	350	39 (x6)	48,5	758	1065	1234	1270
360	610	610	1145	620	285	768	1000	388	305	380	39 (x6)	48,5	800	1108	1328	1450

Input shaft dimensions

Size	d	е	t	b
250	70	140	74,5	20
280	70	140	74,5	20
320	90	170	95	25
360	90	170	95	25

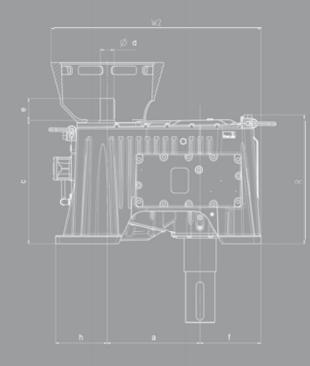
Output shaft dimensions										
Size	D	E	Т	В	F	S	L2			
250	135	250	143	36	M30 (4x)	22	45			
280	135	250	143	36	M30 (4x)	22	45			
320	175	300	185	45	M36 (6x)	27	54			
360	175	300	185	45	M36 (6x)	27	54			

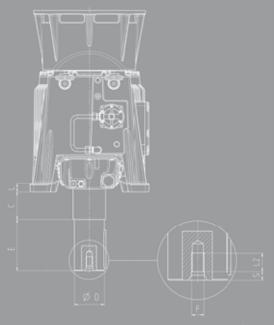
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