

DATA CENTER

INDUSTRIAL

SERVICES

TAL

CLASS A CHILLERS AND HEAT PUMPS AIR CONDENSED WITH SCROLL COMPRESSORS

283.2-1165.9 kW



 MULTI-PROTOCOL COMMUNICATION INTERFACE	 SCROLL COMPRESSORS	 AXIAL FANS	 CORROSION RESISTANT MATERIAL
 A2L READY	 LOW GWP REFRIGERANT	 PLATE HEAT EXCHANGER	 CLASS A



The new TAL range chillers and heat pumps are air/water units in energy class A for both cooling and heating, available for use with R410A refrigerant or, in the "A2L" version, with low environmental impact R454B refrigerant. The TAL range is designed to manage the **conditioning of industrial plants and thermal loads in technological applications, where 24/7 reliability in all working conditions, one of the assets of these units, is a critically important requirement.** The TAL range uses latest generation Scroll compressors, braze-welded plate exchangers optimised for use with high pressure refrigerants (R410A/R454B) and axial fans suitable for outdoor installation.

- 3 different soundproofing setups available: Standard, Low Noise and Super Low Noise
- Electric control panel with IP55 protection rating
- High power density units in both chiller and heat pump modes
- Radial EC motor fans (optional)
- Electronic expansion valve
- Easy accessibility thanks to the optimisation of the internal space
- Programmable microprocessor control with proprietary software
- Compliance with ERP regulations





Easy maintenance

To carry out maintenance of the condensing coil manifolds and refrigeration circuit components, which are located behind the electrical panel, the TAL range is supplied as standard with the Hi-Rail sliding guide. This allows **the control panel to be easily removed**, resulting in extra space for unscheduled maintenance, **without impacting the footprint required for normal operation of the unit.**

Plate heat exchangers

The TAL range uses braze-welded plate exchangers with asymmetrical channels, suitable for the use of high and medium pressure refrigerant gases. The configuration with asymmetrical channels **allows high exchange efficiencies to be reached while maintaining pressure drops low** on the water side, **therefore reducing pumping costs** at both full and partial load.

Maximised energy efficiency

The units of the TAL range fall within the **energy efficiency class A**, in both the chilling only version and the heat pump version. This is thanks to a careful selection of internal components, which also includes the adoption of **innovative high efficiency Scroll compressors with direct start, permanent magnet motor technology.** The high modulation range guaranteed by the multi-Scroll technology allows cooling/heating requirements to be met at any time, **minimising energy waste and increasing seasonal efficiency.**

TAL	294FS	324FS	374FS	404FS	454FS	496FS	556FS	596FS	636FS	676FS	748FS	808FS	868FS	900FS	1072FS	
User water temperature 12/7°C 20% ethylene glycol, outside air 35°C, 40% R.H.																
Cooling capacity	kW	283.2	316.9	366.2	392.9	433.7	476.3	532.1	580.3	621.3	642.9	738.9	781.8	831.4	900.4	1064.6
Total absorbed power	kW	87.3	102.9	115.1	126	147.4	152.7	176.6	193.6	201.1	216.6	229.7	251.8	264.5	293.2	352.7
EER		3.24	3.08	3.18	3.12	2.94	3.12	3.01	3	3.09	2.97	3.22	3.11	3.14	3.07	3.02
Sound power	dB(A)	89	90	90	90	92	91	92	91	93	93	93	93	94	94	95
Sound power [Low noise]	dB(A)	86	87	87	87	89	87	89	88	90	90	90	90	91	91	92
Dimensions [LxHxD]	mm	3865x2652x2256		4865x2652x2256			5860x2652x2256			6860x2652x2256		7865x2652x2256		8865x2652x2256		11270x2652x2256

TAL	294FS	324FS	374FS	404FS	454FS	496FS	556FS	596FS	636FS	676FS	748FS	808FS	868FS	900FS	1072FS	
Utility water temperature 12/7°C, ethylene glycol 20%																
Full Free-Cooling temperature	°C	-8.9	-8.4	-4.6	-5.4	-7	-4.4	-6.1	-7.6	-5.3	-5.8	-5.3	-6.2	-4.6	-6.1	-6.1
Sound power	dB(A)	89	90	90	90	92	91	92	91	93	93	93	93	94	94	95
Sound power [Low noise]	dB(A)	86	87	87	87	89	87	89	88	90	90	90	90	91	91	92
Dimensions [LxHxD]	mm	3865x2652x2256		4865x2652x2256			5860x2652x2256			6860x2652x2256		7865x2652x2256		8865x2652x2256		11270x2652x2256

TAL	294CS	324CS	374CS	404CS	454CS	496CS	556CS	596CS	636CS	676CS	748CS	808CS	868CS	900CS	1072CS	
Cooling: User water values 12/7°C, 35°C outside air, 40% U.R.																
Cooling capacity	kW	286.1	319.8	370.1	397.8	450	482.7	539.7	588.7	629.9	662.1	746.6	791.3	841.2	911.8	1079.7
Total absorbed power	kW	86.2	101.9	114	124.4	145.3	150.3	173.7	190.5	198	213.2	226.8	248.1	261.1	289.2	347.2
EER		3.32	3.14	3.25	3.2	3.1	3.21	3.11	3.09	3.18	3.1	3.29	3.19	3.22	3.15	3.11
SEER		5.18	4.96	5.08	5.05	4.96	5.25	5.22	5.32	5.3	5.18	5.08	5.01	4.97	4.98	5.12
SEPR		5.67	5.65	5.61	5.62	5.6	5.68	5.69	5.78	5.7	5.61	5.75	5.7	5.62	5.76	5.72
Sound power	dB(A)	89	90	90	90	92	91	92	91	93	93	93	93	94	94	95
Sound power [Low noise]	dB(A)	86	87	87	87	89	87	89	88	90	90	90	90	91	91	92
Dimensions [LxHxD]	mm	3520x2652x2256		4520x2652x2256			5520x2652x2256			6520x2652x2256		7520x2652x2256		8520x2652x2256		11085x2652x2256

TAL	294HS	324HS	374HS	404HS	454HS	496HS	556HS	596HS	636HS	676HS	748HS	808HS	868HS	900HS	1072HS	
Heating: User water values 40/45°C, 7°C outside air, 89% U.R.																
Thermal power	kW	292.2	334.3	395.6	421.7	474.9	513.9	573.4	625.2	674.4	706.6	769.6	829.5	884.4	960.3	1165.9
Total absorbed power	kW	90.6	104.1	119.6	128.2	146.5	159.8	178.5	194.5	209.5	219.5	236.4	256.3	274.5	298.2	362.4
SEER		-	-	-	-	-	-	-	5.31	5.19	5.25	4.99	4.94	4.84	4.98	5.16
COP		3.22	3.21	3.31	3.29	3.24	3.22	3.21	3.21	3.22	3.22	3.26	3.24	3.22	3.22	3.22
SCOP		4.16	4.27	4.12	4.13	4.21	3.98	4.11	-	-	-	-	-	-	-	-
Sound power	dB(A)	89	90	90	90	92	91	92	91	93	93	93	93	94	95	96
Sound power [Low noise]	dB(A)	86	87	87	87	89	87	88	87	89	89	90	89	90	91	92
Dimensions [LxHxD]	mm	3520x2652x2256		4520x2652x2256			5520x2652x2256			6520x2652x2256		9085x2652x2256		11085x2652x2256	12930x2652x2256	12930x2652x2256

20% Ethylene glycol | Also available with 60 Hz power supply | Data declared with use of R410A refrigerant