

rev_04 - DICEMBRE 2018

Scambiatori di calore aria/acqua Luft/Wasser-Wärmetauscher		Air/water heat exchanger Échangeurs thermique air/eau	
AW_1208_H31_L AW_1208_H31_H		AW_1213_H31_L AW_1213_H31_H	
800 W		1350 W	
front view facing the environment		rear view facing the cabinet	
			

Use:

The air / water heat exchangers are designed and manufactured to extract heat from the electrical enclosures, employ as the refrigerant the water, taking it from the network or, more often from the water refrigerated circuit of the factory.

They can be advantageously used where the very severe temperature conditions prevent the use of other instruments such as fans, air / air exchangers or air conditioners:

- up to 70 °C of the ambient temperature when installed outside the enclosure
- above 70 °C of the ambient temperature when mounted inside the enclosure.

In environments with high concentration of the dust and / or suspended oil it is not recommended the use of fans, air / air heat exchangers or air conditioners that require frequent and thorough cleaning or maintenance:

The air-water heat exchangers are completely insensitive to airborne pollutants, require minimal maintenance, and offer a degree protection of up to IP 65.

The air / water heat exchangers are, without any doubt, the most efficient, economical and ergonomically advantageous solution to solve the problem of overheating of electrical enclosures.

The air/water heat exchangers produced by S.I.M. Engineering are designed in intrinsic safety and no water leakage from the pipe fittings, from the solenoid valve or from the heat exchanger welds can penetrate inside the electrical panel:

the pipes, the fittings, the solenoid valve and the welded curves of the heat exchanger are separated and segregated with respect to the ventilation and cooling circuit of the cabinet air.

The models with end code _L are not equipped with temperature control devices

The models with _H end code are equipped, as standard, with a NC solenoid valve, controlled by the thermostat, adjustable, factory setting set point = 35 ° C,

Mounting:

The complete assembly supplied with pre-assembled coupling gasket, the connector for a quick electrical connection and the hexagonal head fittings for the hydraulic connection facilitate the installation, almost eliminating the execution times.

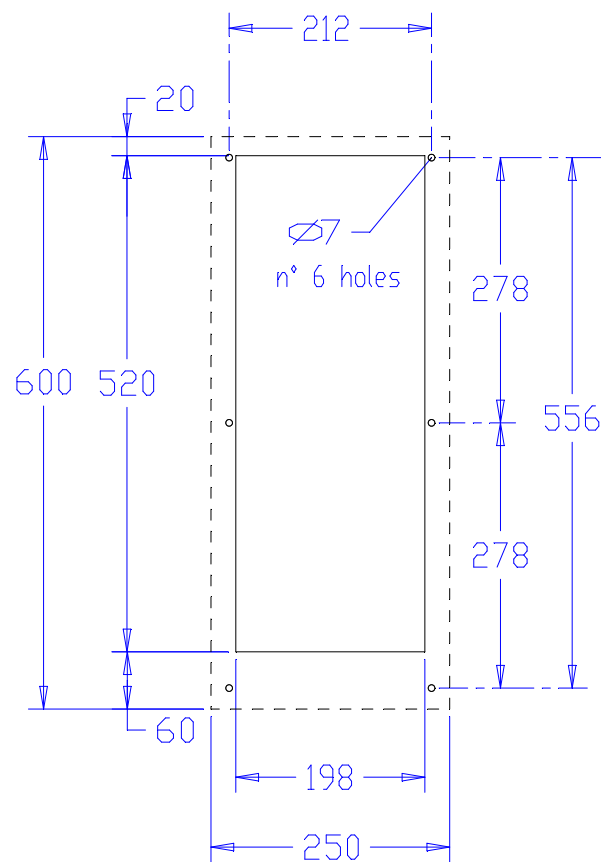
The thermostat adjustment screw, is accessible through a louver facing the inside of the electrical cabinet.

The misaligned hydraulic circuit connections allow the ordered connection of the connecting pipes whatever their orientation.



AW_1180 / AW_1213

Drilling template



water IN
female 3/8"
hexagonal

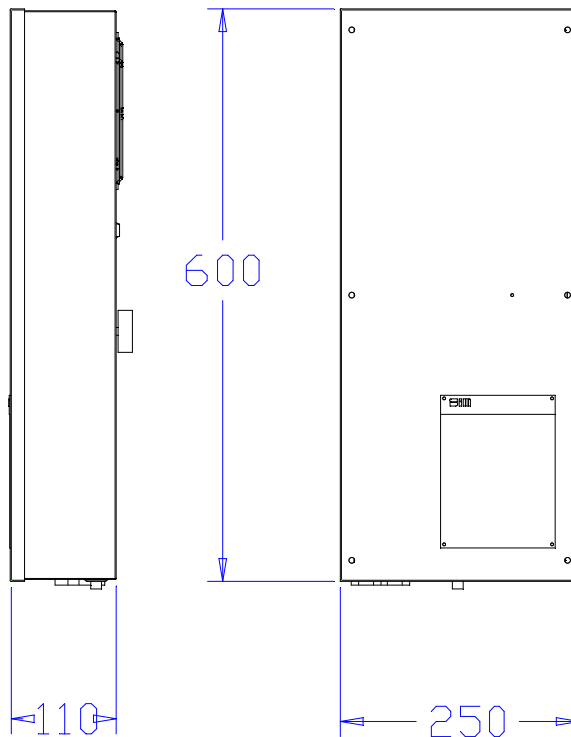
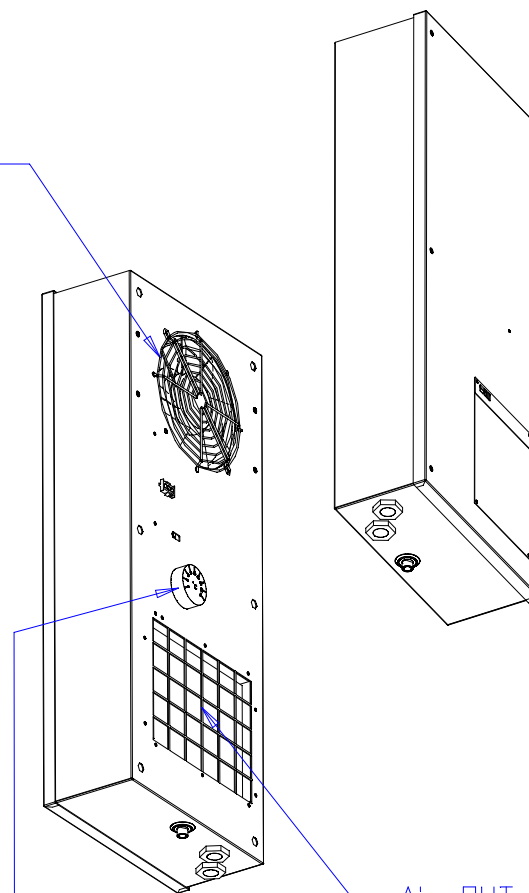
water OUT
female 3/8"
hexagonal

condensate discharge

Air IN

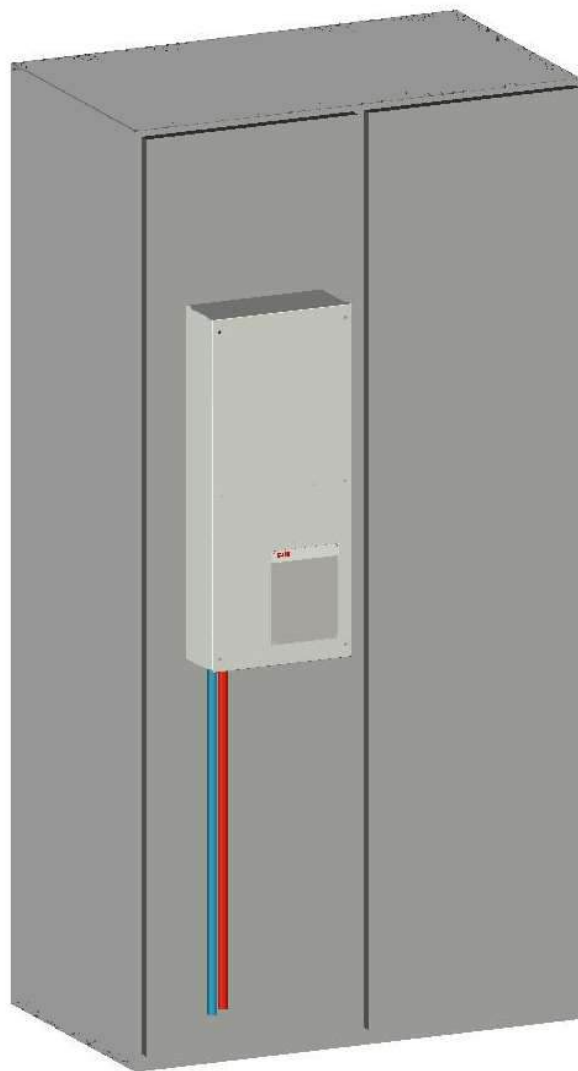
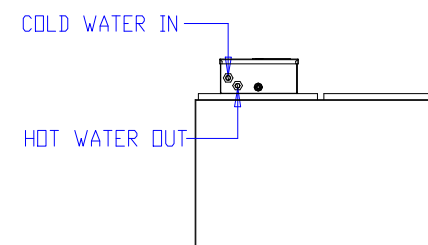
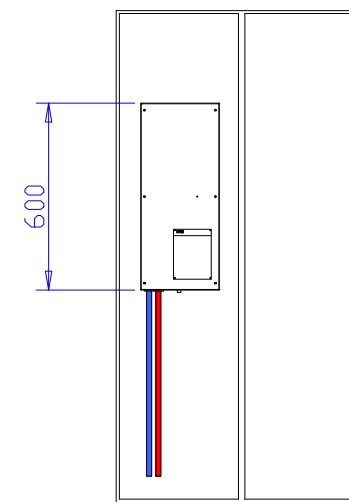
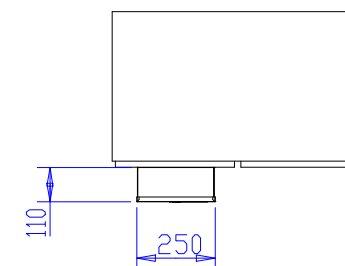
Air OUT

thermostat adjustment screw



Disegno N° :	Formato : A3	Materiale:	Gorlago li:	NOTE :	INGOMBRI	S.I.M. Engineering s.r.l.
Sostituisce il N° :	SCALA 0.200	Spessore:	Disegnato da: Rovelli	Heat exchangers air-water AW_1180/AW_1213		Via B. Colleoni, 35-37 - 24060 Gorlago (BG) - Italy
Sostituito dal N° :		Verniciatura:	Approvato da:			Tel +39 035 88.26.34 - Fax +39 035 482.11.46

Scambiatori di calore Aria/acqua AW_1208 - AW_1213 - ingombri di installazione
Air/water Heat exchangers type AW_1208 - AW_1213 - monting overall dimensions



Scambiatori di calore aria/acqua	Diagramma delle curve caratteristiche
Air/water heat exchanger	Performance diagram
Luft/Wasser-Wärmetauscher	Kennlinienfeld
Échangeurs thermique air/eau	Diagramme des lignes caracteristiques

Caratteristiche tecniche - Technical data - Technische Daten - Données techniques

Codice articolo	Product code	Produkt code	Code du produit		AW 1208 H31_	AW 1213 H31_
Potenza frigorifera Nutzkühlleistung	Cooling capacity Puissance frigorifique	L35 – W10 L35 – W20		W	150 l/h 780 480	200 l/h 1.350 780
Temperatura ambiente Umgebungs-temperatur	Ambient temperature Température ambiante			°C	+1 +70	
Temperatura armadio Temperatur Schaltschrank	Enclosure temperature Température de l'armoire			°C	+1 +55	
Tensione nominale Nennspannung	Rated voltage Tension nominale			V / Hz ~	230V 50–60 Hz 1~ (115V 1~ 60 Hz on request)	
Corrente Nennstromm	Rated current Courant nominale			A	(50/60 Hz) 0,2 / 0,2	(50/60 Hz) 0,26 / 0,34
Potenza assorbita Nennleistung	Input power Puissance absorbée			W	(50/60 Hz) 28 / 29	(50/60 Hz) 58 / 75
Refrigerante	Refrigerant	Kältemittel	Refrigerant		acqua – water – wasser – eau	
Temp. acqua in ingresso Wasservorlauf- temperatur	Inlet water temperature Temp. de l'eau d'entrée			°C	>+ 1°C 50°C	
Pressione di esercizio Betriebs-druck	Operating pressure Pression de régime			bar	1 8	1 8
Capacità scambiatore Exchanger Kapazität	Exchanger capacity Capacité de l'échangeur			dm ³	0,3	0,4
Grado di protezione Schutzart	Protection Category Degré de protection			IP	EN 60529	65
Portata d'aria effettiva Luftstromm	True air flow rate Débit de l'air réel			mc/h	200	300
Pressione sonora Geräusch-pegel	Noise level Niveau sonore			dB (A)	55	62
Peso	Weight	Gewicht	Poids	Kg	7	8
Colore	Colour	Farbton	Coloris	RAL	7035 (other colours or stainless steel on request)	
Raccordi idraulici Kühlwasseranschluss	Cooling water connection Raccordement hydraulique			inches	3 / 8	
Dimensioni L x H x P	Dimensions W x H x D	Abmessungen B x H x T	Dimensions L x H x P	mm.	250 x 600 x 110	
Intermittenza - Duty cycle - Einschalt- dauer - Durée de mise en circuit					100%	
Termostato regolazione Thermostat Bereich	Thermostat range Thermostat gamme			°C	0 +60	set =35 °C – Δt =3k

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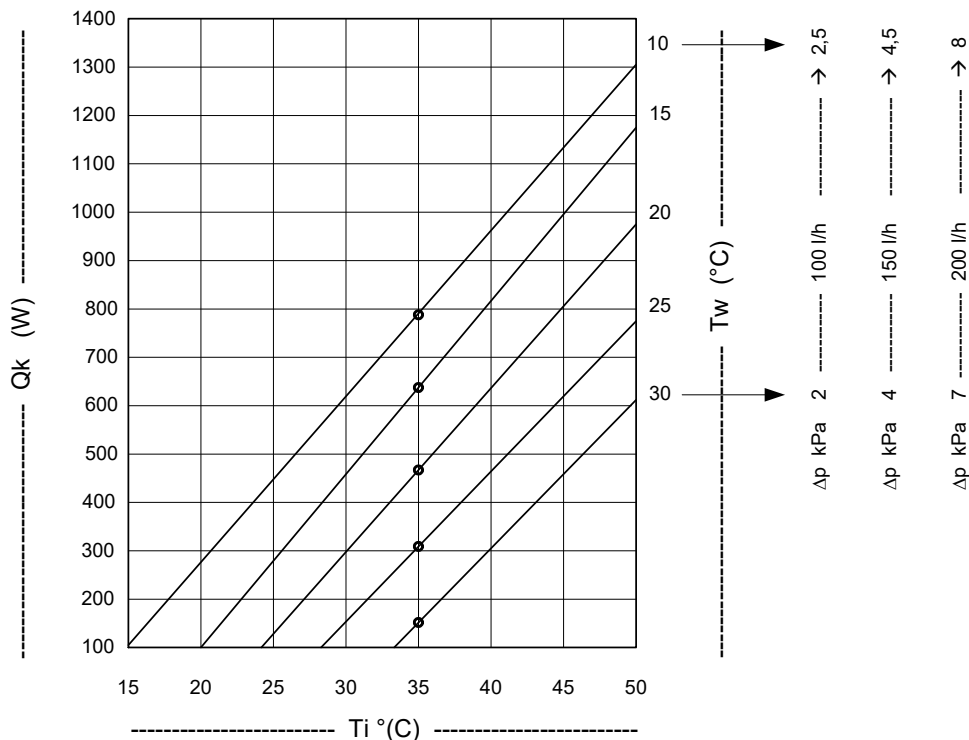
Q_k (W)
 Capacità frigorifera
 Cooling capacity
 Dauer-Nutzkühlleistung
 Puissance frigorifique
 Potencia de refrigeración

T_i (°C)
 Temperatura interna armadio
 Enclosure internal temperature
 Schaltschrank-Innentemperatur
 Temperature a l'intérieur de l'armoire
 Temperatura del armario eléctrico

T_w (°C)
 Temperatura dell'acqua in ingresso
 Water inlet temperature
 Wassereintrittstemperatur
 Température de l'eau à l'entrée
 Temperatura de entrada del agua

Δp (kPa)
 Perdita di carico circuito idraulico
 Water resistance
 Wasserwiderstand
 Resistance hydraulique
 Resistencia del agua

Scambiatore aria-acqua AW_1208 150 l/h 50 Hz



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 Puissance frigorifique
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Scambiatore aria-acqua AW_1213 200 l/h 50 Hz

