

Ventiloconvectoare necarcasate modulare compacte
Modular terminal units slim/reduced



VERSIUNI

- S-OIP** Panou simplu, necarcasat orizontal, aspiratie posteroara
- D-OIP** Panou dublu, necarcasat orizontal, aspiratie posteroara
- S-OII** Panou simplu, necarcasat orizontal, aspiratie inferioara
- D-OII** Panou dublu, necarcasat orizontal, aspiratie inferioara

VERSIONS

- S-OIP** Single panel, horizontal naked terminal, rear air intake
- D-OIP** Double panel, horizontal naked terminal, rear air intake
- S-OII** Single panel, horizontal naked terminal, bottom air intake
- D-OII** Double panel, horizontal naked terminal, bottom air intake

CARATTERISTICHE GENERALI

- Struttura autoportante in lamiera zincata con isolamento termoacustico (versione S) o a doppio pannello sandwich da 20 mm con lamiera esterna preverniciata colore bianco RAL 9002 (versione D); con fori di fissaggio a soffitto/muro, di dimensioni contenute ed ingombri ottimizzati.
- Bacinella raccogli-condensa a doppia inclinazione.
- Batteria di scambio termico ad alta efficienza in tubo di rame ed alette in alluminio, attacchi standard sul lato destro, n°1 batteria per impianto a 2 tubi e n° 2 batterie per impianto a 4 tubi.
- Ventilatori centrifughi con 3 velocità a doppia aspirazione con ventole in alluminio di grande diametro, montati su supporti elastici ed amortizzatori.
- L'unità è dotata di una morsettiera di tipo "Mammut" IP20 montata all'esterno dell'unità.
- Le unità di base vengono fornite senza filtro aria per permettere al cliente di scegliere le sezioni filtranti disponibili come accessori; anche il comando remoto è un accessorio.

GENERAL CHARACTERISTICS

- It has a self-supporting structure made of galvanized sheet with thermal and acoustic insulation (version S) or sandwich double panels 20mm thick with outer painted sheet with white RAL 9002 (version D); with ceiling/wall mounting holes, of contained dimensions and optimized encumbrance.
- Drain pan made with dual slope.
- Heat exchange coils with high efficiency made of copper tubes and aluminium fins, standard connections are located on the right side, 1 coil for a 2-pipe system; 2 coils for a 4-pipe system.
- Centrifugal fans with double air inlet aluminium blades of large diameter with 3-speed, mounted on elastic supports and dampers.
- The unit is provided with a of "Mammoth" type terminal board IP20 installed outside the unit.
- The basic units are supplied without air filter in order to allow the customer to choose between the available filtering sections as accessories; even the remote control is an accessory.

VERSIUNI - VERSIONS

S-OIP

Panou simplu, necarcasate orizontale, aspiratie posteroara
Single panel, horizontal naked terminal, rear air intake

D-OIP

Panou dublu, necarcasate orizontale, aspiratie posteroara
Double panel, horizontal naked terminal, rear air intake

S-OII

Panou simplu, necarcasate orizontale, aspiratie inferioara
Single panel, horizontal naked terminal, bottom air intake

D-OII

Panou simplu, necarcasate orizontale, aspiratie inferioara
Double panel, horizontal naked terminal, bottom air intake



HCN		60	75	86	103	130		HCN
Pot. frigorifera / Cooling cap. / Puiss. frigorifique (1) (*)	W	6.010	7.480	8.590	10.300	12.900	W	(1) Kühleistung / Pot. frigorifica / Cap. de racire
Resa sensibile / Sensible capacity / Rend. sensible (1) (*)	W	4.570	5.560	6.160	8.100	9.950	W	(1) Sensible Leistung / Cap. Sensible / Cap. de rac. sensibila
Pot. calorifica / Heating cap. / Puiss. calorifique (2) (*)	W	6.550	7.900	8.300	11.700	14.400	W	(3) Heizleistung / Pot. calorifica / Pot. calorifica
Pot. calorifica / Heating cap. / Puiss. calorifique (3) (*)	W	13.100	15.800	16.600	23.400	28.800	W	(2) Heizleistung / Pot. calorifica / Cap. de incalzire
Portata d'aria / Air flow / Débit d'air (4)	m³/h	1.100	1.200	1.150	2.100	2.300	m³/h	(4) Luftdurchflussmenge / Caudal de aire / Debit aer
Press. sonora / Sound pressure / Pression sonore (7)								(7) Geräusentwicklung / Nivel de ruido / Nivel de zgomot
Min-Med-Max	dB(A)	37-44-49	38-45-50	38-45-50	45-50-52	46-51-53	dB(A)	Min-Med-Max

HCN		136	150	170	200		HCN
Pot. frigorifera / Cooling cap. / Puiss. frigorifique (1)	W	13.600	15.000	17.200	20.200	W	(1) Kühleistung / Pot. frigorifica / Cap. de racire
Resa sensibile / Sensible capacity / Rend. sensible (1)	W	10.800	11.100	13.300	14.900	W	(1) Sensible Leistung / Cap. Sensible / Cap. de rac. sensibila
Pot. calorifica / Heating cap. / Puiss. calorifique (2)	W	15.650	15.200	19.400	20.400	W	(2) Heizleistung / Pot. calorifica / Pot. calorifica
Pot. calorifica / Heating cap. / Puiss. calorifique (3)	W	31.300	30.400	38.800	40.800	W	(3) Heizleistung / Pot. calorifica / Cap. de incalzire
Portata d'aria / Air flow / Débit d'air (3)	m³/h	2.800	2.200	3.100	2.950	m³/h	(3) Luftdurchflussmenge / Caudal de aire / Debit aer
Press. sonora / Sound pressure / Pression sonore (6)							(6) Geräusentwicklung / Nivel de ruido / Nivel de zgomot
Min-Med-Max	dB(A)	41-48-51	46-51-53	42-49-52	42-49-52	dB(A)	Min-Med-Max

Baterie suplimentara apa calda - Heating coil

HCN		60	75	-	103	130		HCN
Pot. calorifica / Heating cap. / Puiss. calorifique (2)	W	6.610	6.970	-	11.600	12.200	W	(2) Heizleistung / Pot. calorifica / Cap. de incalzire
Portata d'aria / Air flow / Débit d'air (4)	m³/h	1.050	1.140	-	2.000	2.170	m³/h	(4) Luftdurchflussmenge / Caudal de aire / Debit aer

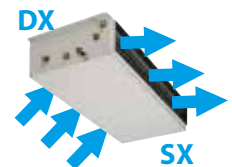
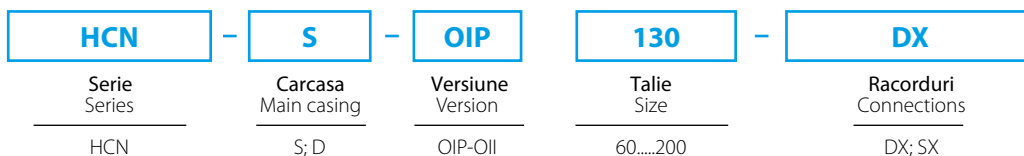
HCN		-	136	170	-		HCN
Pot. calorifica / Heating cap. / Puiss. calorifique (2)	W	-	15.500	16.400	-	W	(2) Heizleistung / Pot. calorifica / Cap. de incalzire
Portata d'aria / Air flow / Débit d'air (3)	m³/h	-	2.670	2.930	-	m³/h	(3) Luftdurchflussmenge / Caudal de aire / Debit aer

Nota: Rese e portate d'aria riferite in condizioni di prevalenza 0 Pa. Per prevalenze utili diverse riferirsi ai diagrammi di variazione di portata d'aria.
 Note: Capacities and air flow rates referred in terms of prevalence 0 Pa. For different static pressure, refer air flow variation diagrams.

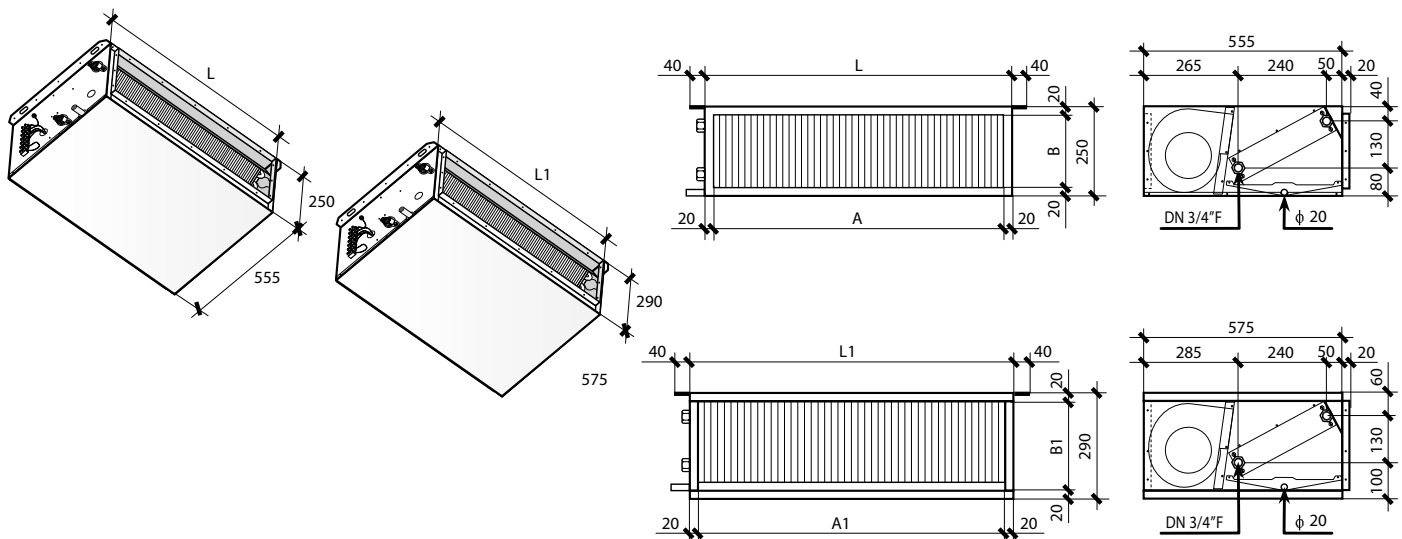
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|---|--|
| <p>(1) Temperatura aria in ingresso: 27°C b.s./19,5°C b.u.
Temperatura acqua in ingresso/uscita: 7°C / 12°C</p> <p>(2) Temperatura aria in ingresso: 20°C b.s.
Temperatura acqua in ingresso/uscita: 45°C / 40°C</p> <p>(3) Temperatura aria in ingresso: 20°C b.s.
Temperatura acqua in ingresso/uscita: 70°C / 60°C</p> <p>(4) Valori nominali rilevati con cassone rif. norme AMCA210-74 e condotto + diaframma rif. norme CNR-UNI10023</p> <p>(7) In campo libero, distanza 3 m. Valori calcolati da potenza sonora rilevata in camera riverberante rif. norme ISO3740 - ISO3742</p> <p>(1)(2)(3)(4)(5)(6) Dati tecnici nominali rif. portata aria (4) alla velocità max ed unità a bocca libera</p> <p>(*) Massima velocità
DN=Diametro nominale; F=Attacchi gas femmina</p> <p>(1) Température air en entrée: 27°C b.s./19°C b.u.
Température eau en entrée/sortie: 7°C / 12°C</p> <p>(2) Température air en entrée: 20°C b.s.
Température eau en entrée/sortie: 45°C / 40°C</p> <p>(3) Température air en entrée: 20°C b.s.
Température eau entrée/sortie: 70°C / 60°C</p> <p>(4) Valeurs nominales mesurées avec caisson selon normes réf. AMCA210-74 Standard et con duit + diaphragme réf. normes CNR-UNI10023</p> <p>(7) En champ libre, distance de 3 m. Valeurs calculées de puissance acoustique mesurée en chambre reverberante réf. normes ISO3740 - ISO3742</p> <p>(1)(2)(3)(4)(5)(6) Données techniques nominales réf. débit d'air (3) à vitesse maximale et unité à soufflage libre
DN=Diamètre nominal; F= Raccords gaz femelle</p> | <p>(1) Entering air temperature: 27°C d.b./19°C w.b.
In/Out water temperature: 7°C / 12°C</p> <p>(2) Entering air temperature: 20°C d.b.
In/Out water temperature: 70°C / 60°C</p> <p>(3) Entering air temperature: 20°C d.b.
In/Out water temperature: 40°C / 45°C</p> <p>(4) Nominal data measured with casing ref. AMCA210-74 standards and plenum + diaphragm ref. CNR-UNI10023 standards.</p> <p>(7) Free field sound pressure, 3 m distance. Data calculated based on sound power measured in riverberation room ref. ISO 3741 - ISO 3742 standards.</p> <p>(1)(2)(3)(4)(5)(6) Nominal technical data , refer air flow (4) to the max speed and unit with free air flow
DN: Nominal diameter; F=Female gas water coil connections</p> <p>(1) Temperatura intrare aer: 27°C b.s./19°C b.u.
Temperatura apa intrare/iesire: 7°C / 12°C</p> <p>(2) Temperatura intrare aer: 20°C b.t.
Temperatura apa intrare/iesire: 45°C / 40°C</p> <p>(3) Temperatura intrare aer: 20°C b.t.
Temperatura apa intrare/iesire: 70°C / 60°C</p> <p>(4) Date nominale calculate cu cascasa standard ref. AMCA210-74 si plenum+diafragma standard CNR-UNI10023</p> <p>(7) Nivel de zgomot in camp deschis, distanta 3 m. Datele au la baza puterea sonora masurata in camera standard de reverberatie ref. ISO3741-ISO3742</p> <p>(1)(2)(3)(4)(5)(6) Date tehnice nominale, debit de referinta max (3) si unitate in camp deschis
DN: Diametru nominal, F= conexiune baterie gaz apa filet interior</p> |
|---|--|

NOMENCLATURA - NOMENCLATURE

Când comandați, specificați întotdeauna un model complet precum exemplul
 When ordering, always specify complete model like the example.



HCN-S-OIP 130-DX

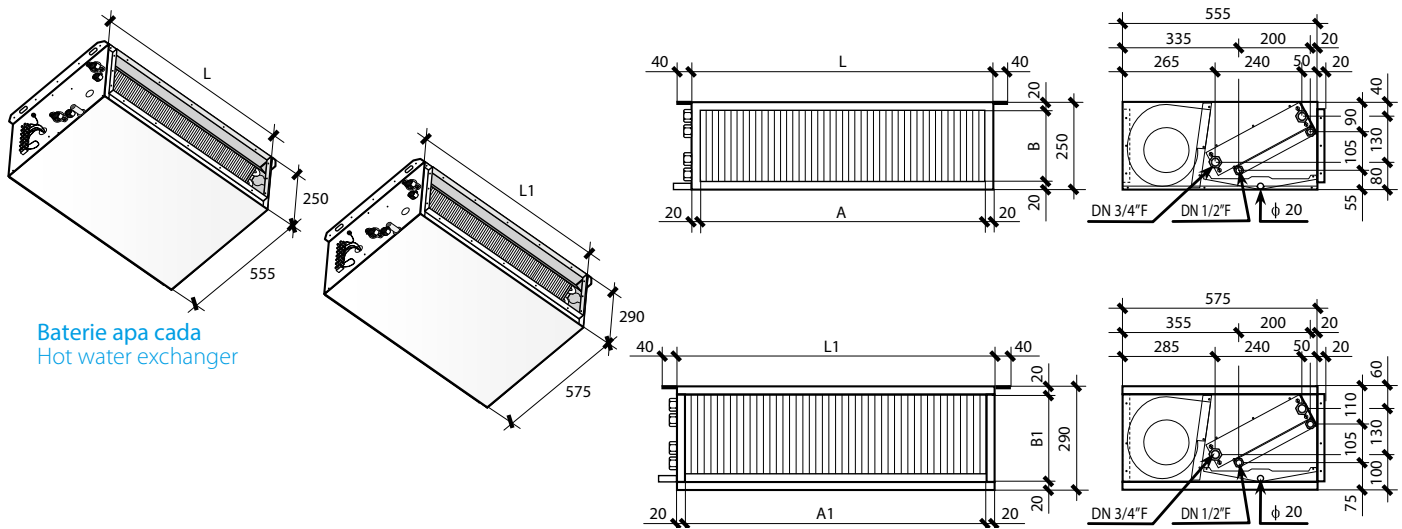


VERSIUNE / VERSION "S"

HCN		60	75	86	103	130	150	136	170	200
L	mm	800	800	800	1.200	1.200	1.200	1.600	1.600	1.600
A	mm	760	760	760	1.160	1.160	1.160	1.560	1.560	1.560
B	mm	210	210	210	210	210	210	210	210	210
Greutate/Weight	kg	34	35	37	48	50	53	63	65	68

VERSIUNE / VERSION "D"

HCN		60	75	86	103	130	150	136	170	200
L1	mm	840	840	840	1.240	1.240	1.240	1.640	1.640	1.640
A1	mm	800	800	800	1.200	1.200	1.200	1.600	1.600	1.600
B1	mm	250	250	250	250	250	250	250	250	250
Greutate/Weight	kg	48	49	51	66	68	71	85	87	90



Baterie apa calda
Hot water exchanger

VERSIUNE / VERSION "S"

HCN		60	75	103	130	136	170
L	mm	800	800	1.200	1.200	1.600	1.600
A	mm	760	760	1.160	1.160	1.560	1.560
B	mm	210	210	210	210	210	210
Greutate/Weight	kg	36	37	51	53	67	69

VERSIUNE / VERSION "D"

HCN		60	75	103	130	136	170
L1	mm	840	840	1.240	1.240	1.640	1.640
A1	mm	800	800	1.200	1.200	1.600	1.600
B1	mm	250	250	250	250	250	250
Greutate/Weight	kg	50	51	69	71	89	91



<p>BC</p>	<p>Baterie apa calda suplimentar pentru sistem 4 tevi in 2 randuri Auxiliary heating coil, 2 rows</p>
<p>MOR-TMB⁽¹⁾</p>	<p>Terminal "Mammut" + Termostat minima temperatura apa calda Tset 32°C Mammoth type terminal board + water low temperature thermostat. Tset 32°C</p>
<p>CRA⁽²⁾</p>	<p>Termostat de perete 230V - Relee 5A/230V. Selector 3 viteze ventilator + Selector Pornit-Oprit + Gestiune sistem 2 tevi cu sau fara 1 vana On/Off 230V / 230V wall thermostat. 3 speeds fan selector + Off/On selector + 2 pipes plant management with or without 230V on-off valves</p>
<p>CRB⁽²⁾</p>	<p>Termostat digital de perete 230V/24V cu relee 3A/230V. Selector 3 viteze ventilator + Mod Auto + Gestiune sistem 2 sau 4 tevi cu sau fara vane On/Off, PWM, 3 puncte, rezistente/ 230V/24V wall digital thermostat. 3 ways and auto selector + 2 or 4 pipes plant management with or without on-off valves, PWM, 3 points, electrical heaters</p>
<p>CBP⁽²⁾</p>	<p>Termostat digital de perete 230V/24V cu relee 3A/230V. Ventilator On/Off si brushless, Gestiune sistem 2 sau 4 tevi cu sau fara vane On/Off sau 0..10V alimentare 230 V sau 24 V / Digital wall thermostat 230V/24V. On-off or brushless fan, 2 or 4 pipes plant management with or without on-off valve or 0..10V with 230V or 24V alimentation.</p>
<p>CRI⁽²⁾</p>	<p>Termostat electronic incastat programabil 230 V - relee 3A/230V. Start/stop + selector 3 trepte de viteze + selector Vara/larna. Gestiune sistem 2 sau 4 tevi cu 1 vana on/off alimentata 230V. Necompatibil cu TMB / Programable 230V ducted electronic thermostat - Relay contacts 3A/230V. Start-Stop + 3-speeds fan selector + heat/cool selector. 2 pipes plant management with or without on-off valve with 230V alimentation. Not compatible with TMB</p>
<p>TEL</p>	<p>Placa principala + senzor aer + senzor apa + receptor infrarosu + telecomanda infrarosu (control sistem 2 sau 4 tevi, cu sau fara vane).. Ventilator 7A-230Vac. Vane: 2A-230Vac. Motherboard + Air sensor + Water sensor - I.R. reciever + I.R. Remote control (control 2-4 pipe units, with/without valves). Fan 7A-230Vac. Valves: 2A-230Vac.</p>
<p>SDI.4X3A</p>	<p>Relee cu 4 iesiri de 3A (posibilitate de control pana la 4 motoare cu 3 viteze de 3A, ex. 4 ventiloconvectoroare mici gen VE) Card with 4 by 3A output (suitable to control up to max No. 4 3-Speed 3A motors ; ex. No. 4 small fan-coils) Contacte-Contacts: 4x 3(0,3)A 230Vac</p>
<p>SDI.2X10A</p>	<p>Relee cu 2 iesiri de 10A (posibilitate de control pana la 2 motoare cu 3 viteze de 10A, ex. 1 ventiloconvector mare gen HCN sau HCNA) Card with 2 by 10A output (suitable to control up to max No. 2 3-Speed motors of 10A ; ex. No. 1 large unit with 2 motors) Contacte-Contacts: 2x 10A-230Vac</p>
<p>RE</p>	<p>Rezistenta electrica integrata +termostat de siguranta "TS" (fara relee de putere) 230V/50Hz/1Ph Electrical heater integrated inside the units + "TS" safety thermostat (without power relay) 230V/50Hz/1Ph</p>
<p>MB*</p>	<p>Motor brushless cu reglaj continuu 0-100% (semnal 0..10V) -50% consum de energie electrica -50% emisii CO₂ -50% nivel de zgomot Brushless motor with continuous variation 0-100% of the air flow (signal 0..10 Vdc) -50% yearly energy consumption -50% CO₂ emissions -50% noise level AccesoriuL obligatoriu pentru functionarea unitatii cu motoare brushless si control al reglajului 0..10V este CBP. An essential accessory for the operation of a unit with Brushless motor is the controller with modulating control signal 0.10 Vdc, accessory CBP.</p>

(1) Toate unitatile HCN au inclus terminalul "Mammut", fara termostat. / All HCN units are supplied with standard Mammoth type terminal board, without thermostat.

(2) Fiecare panou poate controla o singura unitate (vezi accesoriul "SDI"). / Each control panel can control only one unit (see accessory "SDI").



QR1

Tablou electric pentru rezistente 230 V (tablou+magnetotermice+relee)
Power electric board for heaters 230Vac (BOX+magnetothermic+relè)

Model Model	Putere Power	Compatibilitate HCN HCN compatibility	Compatibilitate QR1 QR1 compatibility
RE0.7-24	0,7 kW / 3,1 A	Toate modelele - All sizes	QR1-0,7
RE1.0-24	1,0 kW / 4,4 A	Toate modelele - All sizes	QR1-1,4
RE1.5-24	1,5 kW / 6,6 A	Toate modelele - All sizes	QR1-2,3
RE2.0-24	2,0 kW / 8,7 A	Toate modelele - All sizes	QR1-2,3
RE3.0-24	3,0 kW / 13,1 A	HCN 103-130-150-136-170-200	QR1-3,7

SFA-S
SFA-D

Filtru aer plat (necanalizabil) EU3 (S=panou zincat simplu, D=panou dublu prevopsit)

Flat air filter (not ductable), EU3 filtering level. (S=single skin panel made of galvanized steel, D=double skin panel pre-painted)

SFC-S
SFC-D

Sectiune filtrare ductabila + filtru aer plat EU3 (S=panou zincat simplu, D=panou dublu prevopsit)

Ductable air filter section + flat air filter, EU3 filtering level (S=single skin panel made of galvanized steel, D=double skin panel pre-painted)

SFD-S
SFD-D

Sectiune filtrare ductabila + filtru aer ondulat EU5 H=100mm INALTA EFICIENTA (S=panou zincat simplu, D=panou dublu prevopsit)

Ductable air filter section + HIGH EFFICIENCY ondulated air filter H=100mm, EU5 filtering level (S=single skin panel made of galvanized steel, D=double skin panel pre-painted)

Cadere de pres. aer (ffiltru curat/murdar) - Air press. drop (clean/dirty filter)

HCN	60	75	86	103	130	150	136	170	200
SFA (Pa)	15/35	17/42	16/38	23/55	27/66	25/60	22/54	28/66	25/60
SFC (Pa)	15/35	17/42	16/38	23/55	27/66	25/60	22/54	28/66	25/60
SFD (Pa)	20/37	24/44	22/41	32/59	38/70	35/64	31/58	39/71	35/64

3V-2,5
3V-4
3V-6

Vana cu 3 cai sistem 2 tevi cu servomotor 230V
3-way valve with actuator 230V for 2 pipes units

3VM-2,5
3VM-4
3VM-6

Vana cu 3 cai sistem 2 tevi cu servomotor 230V, semnal modulat 0..10V
3-way valve with actuator 24Vac for 2 pipes units, Modulating signal 0-10V

2V-2,5
2V-4
2V-6

Vana cu 2 cai sistem 2 tevi cu servomotor 230V
2-way valve with actuator 230V for 2 pipes units

2VM-2,5
2VM-4
2VM-6

Vana cu 2 cai sistem 2 tevi cu servomotor 24V, semnal modulat 0..10V
-way valve with actuator 24Vac for 2 pipes units, Modulating signal 0-10V

3VC-2,5
3VC-4
3VC-6

Vana cu 3 cai baterie suplimentara (sistem 4 tevi) cu servomotor 230V
3-way valve for heating coil (4-pipe unit) with actuator 230V

3VCM-2,5
3VCM-4
3VCM-6

Vana cu 3 cai baterie suplimentara (sistem 4 tevi) cu servomotor 24V, semnal modulat 0..10V
3-way valve for heating coil (4-pipe unit) with actuator 24Vac, Modulating signal 0-10V

BMS-U1-V

Placa principala cu comunicare integrata pentru sistem BMS
Main card with integrated communication

SND-A2

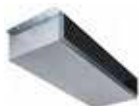
Senzor temperatura aer (obligatoriu pentru fiecare placa BMS)
Air temperature sensor (compulsory per each BMS main card)

SND-W2

Senzor de temperatura apa VARA/IARNA
SUMMER/WINTER Water temperature sensor

SND-W3

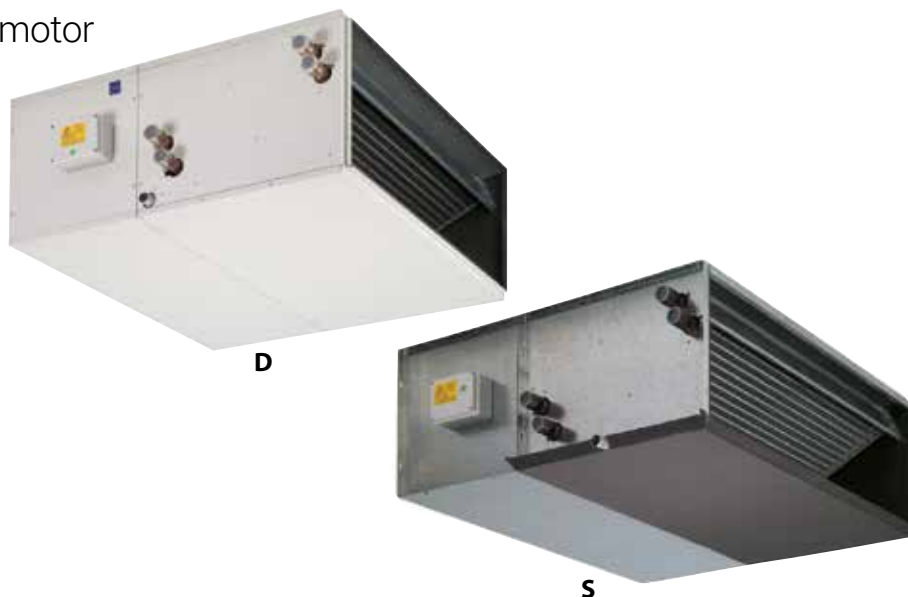
Senzor de temperatura min apa
Minimum water temperature sensor



<p>CD6</p>	<p>Panou de comanda de perete digital Wall mounted external digital control</p>																																								
<p>2VC-2,5 2VC-4 2VC-6</p>	<p>Vana cu 2 cai baterie suplimentara (sistem 4 tevi) cu servomotor 230V 2-way valve for heating coil (4-pipe unit) with actuator 230V</p>																																								
<p>2VCM-2,5 2VCM-4 2VCM-6</p>	<p>Vana cu 2 cai baterie suplimentara (sistem 4 tevi) cu servomotor 24V, semnal modulat 0..10V 2-way valve for heating coil (4-pipe unit) with actuator 24Vac, Modulating signal 0-10V</p> <p>Notă: fiecare kit include o singură vană cu servomotor. În cazul unui sistem cu 4 tevi, trebuie să fie prevăzute 2 vane. Exemplu, pentru sistem 4 tevi, în cazul vanelor cu 3 căi, alimentare 230 V: 3V + 3VC Note: Every single kit includes one valve and one actuator. In case of 4-pipe system must be provided n° 2 valves. For example, with ducted 4-pipe, in the case of 3-way valves, power supply 230 V: 3V + 3VC</p> <p>caracteristici vane 2/3 cai - COMBINATII RECOMANDATE 3/2 way valve characteristics - RECOMMENDED MATCHINGS</p> <table border="1"> <thead> <tr> <th>HCN</th> <th>60</th> <th>75</th> <th>86</th> <th>103</th> <th>130</th> <th>150</th> <th>136</th> <th>170</th> <th>200</th> </tr> </thead> <tbody> <tr> <td>Caracteristici vana Valve characteristics</td> <td colspan="2">Kvs 2,5</td> <td colspan="3">Kvs 4</td> <td colspan="4">Kvs 6</td> </tr> <tr> <td>Racorduri vana User side connection</td> <td colspan="9">DN 3/4" M</td> </tr> <tr> <td>Presiune nominala Nominal pressure</td> <td colspan="9">PN 16 bar</td> </tr> </tbody> </table>	HCN	60	75	86	103	130	150	136	170	200	Caracteristici vana Valve characteristics	Kvs 2,5		Kvs 4			Kvs 6				Racorduri vana User side connection	DN 3/4" M									Presiune nominala Nominal pressure	PN 16 bar								
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<p>SBC-O</p>	<p>Tava de condens suplimentara din otel zincat izolat Auxiliary drain pan made of galvanized steel- thermal insulation</p>																																								
<p>PMP</p>	<p>Pompa de condens cu 8A(250V) Condensate pump provided with 8A (250V)</p>																																								
<p>SSM-S SSM-D</p>	<p>Camera de amestec aer proaspat (0-33%) / recirculare (100-67%) sau viceversa (cuplate la comenzi manuale sau motorizate (S=panou zincat simplu, D=panou dublu prevopsit) External/Internal mixing section "external air 0-33% - internal air 100-67% or vice versa (coupled louvers with manual controls - can be motorized) (S=single skin panel made of galvanized steel, D=double skin panel pre-painted)</p> <p>Cadere de presiune aer - Air pressure drop</p> <table border="1"> <thead> <tr> <th>HCN</th> <th>60</th> <th>75</th> <th>86</th> <th>103</th> <th>130</th> <th>150</th> <th>136</th> <th>170</th> <th>200</th> </tr> </thead> <tbody> <tr> <td>SSM (Pa)</td> <td>13</td> <td>15</td> <td>14</td> <td>20</td> <td>24</td> <td>22</td> <td>20</td> <td>24</td> <td>22</td> </tr> <tr> <td>S2S (Pa)</td> <td>15</td> <td>17</td> <td>16</td> <td>23</td> <td>27</td> <td>25</td> <td>22</td> <td>28</td> <td>25</td> </tr> </tbody> </table>	HCN	60	75	86	103	130	150	136	170	200	SSM (Pa)	13	15	14	20	24	22	20	24	22	S2S (Pa)	15	17	16	23	27	25	22	28	25										
HCN	60	75	86	103	130	150	136	170	200																																
SSM (Pa)	13	15	14	20	24	22	20	24	22																																
S2S (Pa)	15	17	16	23	27	25	22	28	25																																
<p>S2S-S S2S-D</p>	<p>Sectiune închisă + 2 clapete de reglare / ajustare (1 prag de dedesubt + 1 pârghie pe partea din spate) - Clapete fără comenzi - pot fi control manuale sau motorizate (S=panou zincat simplu, D=panou dublu prevopsit) Closed section + 2 Regulation/adjustment louvers (1 louver below + 1 louver on the rear side) - Louvers without controls - can be either manual or motorized control (S=single skin panel made of galvanized steel, D=double skin panel pre-painted)</p>																																								
<p>MS</p>	<p>Servomotor 230V on/off clapeta aer Motor "230Vac on-off" suitable for air damper</p>																																								
<p>SSL-S SSL-D</p>	<p>Atenuator de zgomot (pentru aspiratie sau refulare) (S=panou zincat simplu, D=panou dublu prevopsit) Labyrinth noise level attenuator section, suitable for both air intake/supply outlets (S=single skin panel made of galvanized steel, D=double skin panel pre-painted)</p>																																								
<p>SCM-S SCM-D</p>	<p>Sectiune din otel zincat, "Ø" cu racorduri circulare din plastic (S=panou zincat simplu, D=panou dublu prevopsit) Steel section with spigots "Ø" with variable diameter made of plastic material, external insulation (S=single skin panel made of galvanized steel, D=double skin panel pre-painted)</p> <p>Numar de racorduri circulare Ø - N° and Ø spigots</p> <table border="1"> <thead> <tr> <th>HCN</th> <th>60</th> <th>75</th> <th>86</th> <th>103</th> <th>130</th> <th>150</th> <th>136</th> <th>170</th> <th>200</th> </tr> </thead> <tbody> <tr> <td>SCM n° x Ø</td> <td colspan="3">3xØ200/180/160</td> <td colspan="3">5xØ200/180/160</td> <td colspan="3">6xØ200/180/160</td> </tr> </tbody> </table>	HCN	60	75	86	103	130	150	136	170	200	SCM n° x Ø	3xØ200/180/160			5xØ200/180/160			6xØ200/180/160																						
HCN	60	75	86	103	130	150	136	170	200																																
SCM n° x Ø	3xØ200/180/160			5xØ200/180/160			6xØ200/180/160																																		

Ventiloconvectoare necarcasate cu presiune medie cu motoare DC Brushless si AC asincron

Medium ductable terminal units with Brushless DC and AC asynchronous motor



2 motoare: 6 Poli sau Brushless

N°2 motor types: 6 Poles or Brushless

VERSIONI

- S** Necarcasate - Panou simplu
D Necarcasate aparente - Panou dublu prevopsit

VERSIONS

- S** Concealed version - Single panel
D With cabinet version - Double panel

HCNA sunt mici unități de tratare a aerului, care pot fi configurate liber. Este posibil să selectați între 2 motoare (6 poli sau brushless), 2 tipuri de carcase (S sau D), sisteme în 2/4 tevi și o gamă largă de accesorii cuplate. Flexibilitatea largă combinată cu gama completă de capacități este ideea câștigătoare a HCNA care permite să găsești cea mai bună soluție pentru a satisface nevoile tale.

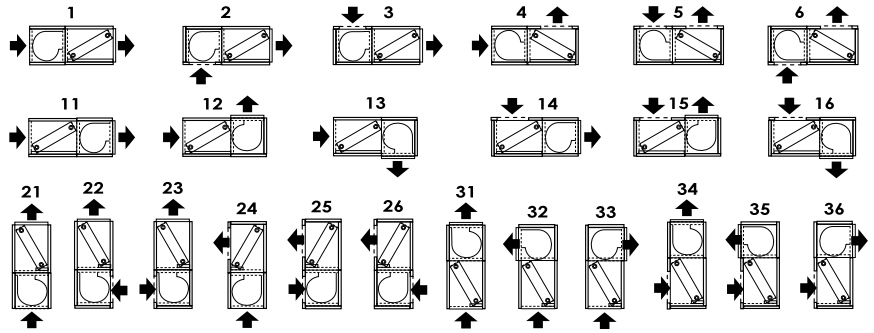
CARACTERISTICI CONSTRUCTIVE

- Structură autoportantă din tablă galvanizată groasă cu rezistență la rugină, coroziune, agenți chimici, solvenți, alifatici și alcooli. Panouri autoportante și detașabile; asamblare cu șuruburi autofiletante pentru o inspecție / întreținere rapidă și ușoară. Acestea sunt disponibile în 2 versiuni „S” (panou simplu) și „D” (panouri duble Sandwich de 20 mm vopsită exterior cu RAL 9002 alb). Unitățile asigură schimbatoare de căldură (fără robinete de aerisire) cu eficiență ridicată din tevi de cupru și aripioare de aluminiu. Conexiuni standard situate în dreapta; la cerere pentru conexiuni din stânga la costuri suplimentare. Secțiunile cu baterii de răcire sunt echipate cu o tava de condens din tabla zincată + izolație termică externă (opțional, cu costuri suplimentare, realizate din oțel inoxidabil AISI 304) cu o singură pantă pentru a asigura scurgerea optimă a condensului, cu orificiu de scurgere de Ø30mm.
- Echipamentul electric standard include: placa de borne IP20 tip „Mammoth” instalată în afara unității pe aceeași parte a conexiunilor de apă. Pentru unitățile cu 2 motoare, se recomandă instalarea a 3 rele sau a plăcii de interfață.
- Toate versiunile standard sunt furnizate cu orificii de intrare și ieșire a aerului liber, fără grătar / protecție și fără filtru de aer.

The HCNA are small air handling units, which can be freely configured. It is possible to select between 2 motors (6 Poles or Brushless), 2 types of housing cases (S or D), the version of 2/4 pipes and a wide range of coupled accessories. The wide flexibility combined with the full range of capacity rating is the HCNA winning idea that allows to find the best solution for suiting your needs.

TECHNICAL FEATURES

- It has a self-supporting structure made of thick galvanized sheet making it resistant to rust, corrosion, chemical agents, solvents, aliphatic and alcohols. Self-supporting panels and removable; assembling with self-tapping screws for quick and easy inspection/maintenance. They are available in housing cases “S”-version (Simple panel) and “D”-version (Sandwich double panels 20mm thick with outer painted sheet with white RAL 9002). The units provide heat exchange coils (without air vent valves) with high-efficiency made of copper tubes and aluminium fins. Standard connections located on the right; on request for left connections at additional charges. The sections with cooling coil are equipped with a drain pan in galvanized sheet + external thermal insulation (optional, with additional charges, made of stainless steel AISI 304) with a single slope in order to ensure the optimal condensate draining, with drain hole of Ø30mm.
- The standard electrical equipment includes: “Mammoth” type terminal board IP20 installed outside the unit on the same side of the water connections. For units with 2 motors, it is recommended the installation of 3 relays or the interface card.
- All the standard versions are supplied with free air inlet and air outlet openings, without any grill/protection and without air filter.



HCNA

71 117 143 165 216⁽⁷⁾

HCNA

Pot. frigorifera / Cooling cap. / Puiss. frigorifique (1)	W	7.100	11.700	14.300	16.500	21.600	W	(1) Kühlleistung / Pot. frigorifica / Cap. de racire
Resa sensibile / Sensible capacity / Rend. sensible (1)	W	5.800	9.800	11.700	13.600	17.800	W	(1) Sensible Leistung / Cap. Sensible / Cap. de rac. sensibila
Pot. calorifica / Heating cap. / Puiss. calorifique (2)	W	16.700	28.200	34.000	39.400	51.300	W	(2) Heizleistung / Pot. calorifica / Cap. de incalzire
Pot. calorifica / Heating cap. / Puiss. calorifique (3)	W	8.350	14.100	17.000	19.700	25.650	W	(3) Heizleistung / Pot. calorifica / Cap. de incalzire
Portata d'aria / Air flow / Débit d'air (3)	m ³ /h	1.440	2.480	2.890	3.350	4.800	m ³ /h	(3) Luftdurchflussmenge / Caudal de aire / Debit aer
Portata acqua / Water flow / Débit d'eau (4)								(4) Wasserdurchflussmenge / Caud. de agua / Debit apa
Raffreddamento / Cooling / Refroidissement	l/h	1.222	2.013	2.460	2.838	3.716	l/h	Kühlung / Enfriamiento / Racire
Riscaldamento / Heating / Chauffage	l/h	1.437	2.426	2.924	3.389	4.412	l/h	Heizung / Calefacción / Incalzire
Perdite di carico acqua / Pressure drop water / Pertes de pression eau (5)								(5) Leitungsverluste / Pérdidas de carga agua / Cadere de presiune
Raffreddamento / Cooling / Refroidissement	kPa	26,2	27,3	28,5	25,9	26,6	kPa	Kühlung / Enfriamiento / Racire
Riscaldamento / Heating / Chauffage	kPa	28,3	30,9	31,4	28,8	29,2	kPa	Heizung / Calefacción / Incalzire
Press. sonora / Sound pressure / Pression sonore (6)								(6) Geräuschentwicklung / Nivel de ruido / Nivel de zgomot
Min-Med-Max	dB(A)	35-42-44	43-46-49	41-45-47	37-42-46	49-52-54	dB(A)	Min-Med-Max
Motori/Ventilatori - Motors/Fans - Moteurs/Ventilateurs	n°/n°	1/1	1/1	1/1	1/1	1/1	n°/n°	Motor/Ventilator-Motor/Ventilador-Motor/Ventilator
Corr. assorbita / Absorbed current / Cou. absorbé	A	1x1,2	1x2,6	1x2,5	1x2,7	1x6,6	A	Stromaufnahme / Corr. absorbida / Curent absorbit
Alimentazione / Power supply / Alimentation		230Vac - 1 Ph - 50Hz						Versorgung / Alimentación / Alimentare
Poli / Poles / Pôles		6						Pole / Pólos / Pólos
Batteria/Ranghi - Coil/Rows - Batterie/Rangées	n°	3R					n°	Batterie/Zellen-Bateria/Bancos de tubos-Schimbador/baterii
Attacchi idraulici / Water connections / Con. hydrauliques	Ø	3/4"	1"	1"	1"	1"-1/4"	Ø	Hyd. Anschlüsse / Acoplam. para agua / Racorduri hidraulice
Scarico condensa / Drain pipe / évac. condensant	Ø (mm)	30					Ø (mm)	Kondenswasser. / Desagüe cond. / Teava de condens

Baterie de apa calda aditionala - Heating coil

HCNA

71 117 143 165 216⁽⁷⁾

HCNA

Pot. calorifica / Heating cap. / Puiss. calorifique (2)	W	12.200	21.300	26.400	30.800	39.400	W	(2) Heizleistung / Pot. calorifica / Cap. de incalzire
Portata d'aria / Air flow / Débit d'air (3)	m ³ /h	1.320	2.420	2.840	3.350	4.800	m ³ /h	(3) Luftdurchflussmenge / Caudal de aire / Debit aer
Portata acqua / Water flow / Débit d'eau (4)								(4) Wasserdurchflussmenge / Caud. de agua / Debit apa
Riscaldamento / Heating / Chauffage	l/h	1.053	1.832	2.270	2.649	3.389	l/h	Heizung / Calefacción / Incalzire
Perdite di carico acqua / Pressure drop water / Pertes de pression eau (5)								(5) Leitungsverluste / Pérdidas de carga agua / Cadere de presiune
Riscaldamento / Heating / Chauffage	kPa	29,7	35,0	35,3	36,4	38,4	kPa	Heizung / Calefacción / Incalzire
Batteria/Ranghi - Coil/Rows - Batterie/Rangées	n°	2R	2R	2R	2R	2R	n°	Batterie/Zellen-Bateria/Bancos de tubos-Schimbador/baterii
Attacchi idraulici / Water connections / Con. hydrauliques	Ø	3/4"	1"	1"	1"	1"-1/4"	Ø	Hyd. Anschlüsse / Acoplam. para agua / Racorduri hidraulice

(1) Temperatura aria in ingresso: 27°C b.s./19°C b.u.
Temperatura acqua in ingresso/uscita: 7°C / 12°C
Massima velocità
(2) Temperatura aria in ingresso: 20°C b.s.
Temperatura acqua in ingresso/uscita: 70°C / 60°C
Massima velocità
(3) Valori nominali rilevati con cassone rif. norme AMCA210-74 e condotto + diaframma rif. norme CNR-UNI10023
(6) In campo libero, distanza 3 m. Valori calcolati da potenza sonora rilevata in camera riverberante rif. norme ISO3740 - ISO3742
(7) Con accessori CRB-CRBM-CBP-CRA. Per unità dotate di motore con assorbimento elettrico maggiore di 3A, oppure con 2 motori, aggiungere 1 scheda interfaccia SDI.2x10A.
(1)(2)(3)(4)(5) Dati tecnici nominali rif. portata aria (3) alla velocità max ed unità a bocca libera
(*) DN=Diametro nominale; F=Attacchi gas femmina

(1) Entering air temperature: 27°C d.b./19°C w.b.
In/Out water temperature: 7°C / 12°C
Max speed
(2) Entering air temperature: 20°C d.b.
In/Out water temperature: 70°C / 60°C
Max speed
(3) Nominal data measured with casing ref. AMCA210-74 standards and plenum + diaphragm ref. CNR-UNI10023 standards.
(6) Free field sound pressure, 3 m distance. Data calculated based on sound power measured in riverberation room ref. ISO 3741 - ISO 3742 standards.
(1)(2)(3)(4)(5) Nominal technical data , refer air flow (3) to the max speed and unit with free air flow
(*) DN: Nominal diameter; F= Female gas water coil connections

(1) Temperatură aer în intrare: 27°C b.s./19°C b.u.
Temperatură apă în intrare/iesire: 7°C / 12°C
Viteza maximă
(2) Temperatură aer în intrare: 20°C b.s.
Temperatură apă în intrare/iesire: 70°C / 60°C
Viteza maximă
(3) Valori nominale calculate cu casca standard ref. AMCA210-74 Standard et conduit + diaphragme ref. normes CNR-UNI10023
(6) Enchamps libre, distance de 3 m. Valeurs calculées de puissance acoustique mesurée en chambre reverbante ref. normes ISO3740 - ISO3742
(7) With CRB-CRBM-CBP-CRA accessories. For units with absorbed current power input higher than 3A, or with 2 motors, provide 1 SDI.2x10A power board
(1) (2) (3) (4) (5) Données techniques nominales réf. débit d'air (3) à vitesse maximale et unité à soufflage libre
(*) DN=Diamètre nominal; F= Raccords gaz femelle

(1) Temperatură intrare aer
Temperatură apă intrare/iesire
Viteza max
(2) Temperatură intrare aer
Temperatură apă intrare/iesire
Viteza max
(3) Date nominale calculate cu cascasa standard ref. AMCA210-74 si plenum+diaphragma standard CNR-UNI10023
(6) Nivel de zgomot în camp deschis, distanța 3 m. Datele au la baza puterea sonora măsurată în camera standard de reverberatie ref. ISO3741-ISO3742
(1)(2)(3)(4)(5) Date tehnice nominale, debit de referință max (3) si unitate în camp deschis
(*) DN: Diametru nominal, F= conexiune baterie gaz apă filet interior

290⁽⁷⁾ 240⁽⁷⁾⁽⁸⁾ 293⁽⁷⁾⁽⁸⁾ 330⁽⁷⁾⁽⁸⁾ 565⁽⁷⁾⁽⁸⁾ 685⁽⁷⁾⁽⁸⁾

Pot. frigorifera / Cooling cap. / Puiss. frigorifique (1)	W	29.100	24.000	29.300	33.000	56.500	68.500	W	(1) Kühlleistung / Pot. frigorifica / Cap. de racire
Resa sensibile / Sensible capacity / Rend. sensible (1)	W	23.700	20.200	23.900	27.200	43.100	54.000	W	(1) Sensible Leistung / Cap. Sensible / Cap. de rac. sensibila
Pot. calorifica / Heating cap. / Puiss. calorifique (2)	W	68.200	58.600	69.200	78.300	121.900	153.300	W	(2) Heizleistung / Pot. calorifica / Cap. de incalzire
Pot. calorifica / Heating cap. / Puiss. calorifique (3)		34.100	29.300	34.600	39.150	60.950	76.650		(3) Heizleistung / Pot. calorifica / Cap. de incalzire
Portata d'aria / Air flow / Débit d'air (3)	m ³ /h	5.800	4.970	5.770	6.700	9.600	11.600	m ³ /h	(3) Luftdurchflussmenge / Caudal de aire / Debit aer
Portata acqua / Water flow / Débit d'eau (4)									(4) Wasserdurchflussmenge / Caud. de agua / Debit apa
Prevalenza statica utile / External static pressure / Pression statique	Pa	106	106	85	85	135	135	Pa	Statischer Druck / Presión estática / Presiune statică
Raffreddamento / Cooling / Refroidissement	l/h	5.006	4.128	5.040	5.676	9.718	11.782	l/h	Kühlung / Enfriamiento / Racire
Riscaldamento / Heating / Chauffage	l/h	5.866	5.040	5.952	6.734	10.4840	13.184	l/h	Heizung / Calefacción / Incalzire
Perdite di carico acqua / Pressure drop water / Pertes de pression eau (5)									(5) Leitungsverluste / Pérdidas de carga agua / Cadere de presiune
Raffreddamento / Cooling / Refroidissement	kPa	31,3	25,7	26,0	27,3	30,6	33,4	kPa	Kühlung / Enfriamiento / Racire
Riscaldamento / Heating / Chauffage	kPa	33,5	29,9	28,3	30,0	27,8	32,6	kPa	Heizung / Calefacción / Incalzire
Press. sonora / Sound pressure / Pression sonore (6)									(6) Geräusentwicklung / Nivel de ruido / Nivel de zgomot
Min-Med-Max	dB(A)	45-48-50	46-49-52	44-48-50	40-45-49	52-55-57	48-51-53	dB(A)	Min-Med-Max
Motori/Ventilatori - Motors/Fans - Moteurs/Ventilateurs	n°/n°	1/1	2/2	2/2	2/2	2/2	2/2	n°/n°	Motor/Ventilator-Motor/Ventilador-Motor/Ventilator
Corr. assorbita / Absorbed current / Cou.absorbé	A	1x6,8	2x2,6	2x2,5	2x2,7	2x6,6	2x6,8	A	Stromaufnahme / Corr. absorbida / Curent absorbit
Alimentazione / Power supply / Alimentation		230Vac - 1 Ph - 50Hz							Versorgung / Alimentación / Alimentare
Poli / Poles / Póles		6							Pole / Pólos / Pólos
Batteria/Ranghi - Coil/Rows - Batterie/Rangées	n°	3R	3R	3R	3R	4R	4R	n°	Batterie/Zellen-Batería/Bancos de tubos-Schimbador/baterii
Attacchi idraulici / Water connections / Con. hydrauliques	Ø	1"-1/2"M	1"-1/4"M	1"-1/2"M	1"-1/2"M	1"-1/2"M	1"-1/2"M	Ø	Hyd. Anschlüsse / Acoplam. para agua / Racorduri hidraulice
Scarico condensa / Drain pipe / évac. condensant	Ø (mm)	30	30	30	30	30	30	Ø (mm)	Kondenswasser. / Desagüe cond. / Teava de condens

Baterie de apa calda aditionala - Heating coil

290⁽⁷⁾ 240⁽⁷⁾⁽⁸⁾ 293⁽⁷⁾⁽⁸⁾ 330⁽⁷⁾⁽⁸⁾ 565⁽⁷⁾⁽⁸⁾ 685⁽⁷⁾⁽⁸⁾

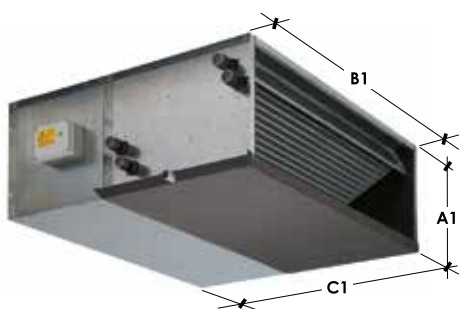
Pot. calorifica / Heating cap. / Puiss. calorifique (2)	W	53.300	43.800	53.400	60.700	83.000	100.900	W	(2) Heizleistung / Pot. calorifica / Cap. de incalzire
Portata d'aria / Air flow / Débit d'air (3)	m ³ /h	5.800	4.830	5.680	6.700	9.600	11.600	m ³ /h	(3) Luftdurchflussmenge / Caudal de aire / Debit aer
Prevalenza statica utile / External static pressure / Pression statique	Pa	74	74	52	52	112	112	Pa	Statischer Druck / Presión estática / Presiune statică
Portata acqua / Water flow / Débit d'eau (4)									(4) Wasserdurchflussmenge / Caud. de agua / Debit apa
Riscaldamento / Heating / Chauffage	l/h	4.584	3.768	4.595	5.221	7.138	8.678	l/h	Heizung / Calefacción / Incalzire
Perdite di carico acqua / Pressure drop water / Pertes de pression eau (5)									(5) Leitungsverluste / Pérdidas de carga agua / Cadere de presiune
Riscaldamento / Heating / Chauffage	kPa	35,7	36,0	32,3	35,1	35,1	38,5	kPa	Heizung / Calefacción / Incalzire
Batteria/Ranghi - Coil/Rows - Batterie/Rangées	n°	3R	3R	3R	3R	4R	4R	n°	Batterie/Zellen-Batería/Bancos de tubos-Schimbador/baterii
Attacchi idraulici / Water connections / Con. hydrauliques	Ø	1"-1/4"M	1"-1/4"M	1"-1/4"M	1"-1/4"M	1"-1/4"M	1"-1/4"M	Ø	Hyd. Anschlüsse / Acoplam. para agua / Racorduri hidraulice

- (1) Temperatura aria in ingresso: 27°C b.s./19°C b.u.
Temperatura acqua in ingresso/uscita: 7°C / 12°C
Massima velocità
- (2) Temperatura aria in ingresso: 20°C b.s.
Temperatura acqua in ingresso/uscita: 70°C / 60°C
Massima velocità
- (3) Valori nominali rilevati con cassone rif. norme AMCA210-74 e condotto + diaframma rif. norme CNR-UNI10023
- (6) In campo libero, distanza 3 m. Valori calcolati da potenza sonora rilevata in camera riverberante rif. norme ISO3740 - ISO3742
- (7) Con accessori CRB-CRBM-CBP-CRA. Per unità dotate di motore con assorbimento elettrico maggiore di 3A, oppure con 2 motori, aggiungere 1 scheda interfaccia SDI.2x10A.
- (8) Con accessorio TEL. Per unità dotate di motore con assorbimento elettrico maggiore di 7A, oppure con 2 motori, aggiungere 1 scheda interfaccia SDI.2x10A.
- (1)(2)(3)(4)(5) Dati tecnici nominali rif. portata aria (3) alla velocità max ed unità a bocca libera
- (*) DN=Diametro nominale; F=Attacchi gas femmina; M= Maschio

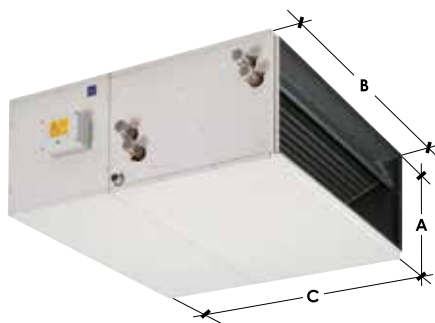
- (1) Température air en entrée: 27°C b.s./19°C b.u.
Température eau en entrée/sortie: 7°C / 12°C
Maximale vitesse
- (2) Température air en entrée: 20°C b.s.
Température eau en entrée/sortie: 70°C / 60°C
Vitesse maximale
- (3) Valeurs nominales mesurées avec caisson selon normes réf. AMCA210-74 Standard et con duit + diaphragme réf. normes CNR-UNI10023
- (6) Enchamp libre, distance de 3 m. Valeurs calculées de puissance acoustique mesurée en chambre reverberante ref. normes ISO3740 - ISO3742
- (7) With CRB-CRBM-CBP-CRA accessories. For units with absorbed current power input higher than 3A, or with 2 motors, provide 1 SDI.2x10A power board.
- (8) With TEL accessory. For units with absorbed current power input higher than 7A, or with 2 motors, provide 1 SDI.2x10A power board.
- (1) (2) (3) (4) (5) Données techniques nominales réf. débit d'air (3) à vitesse maximale et unité à soufflage libre
- (*) DN=Diamètre nominal; F= Raccords gaz femelle; M= Mâle

- (1) Entering air temperature: 27°C d.b./19°C w.b.
In/Out water temperature: 7°C / 12°C
Max speed
- (2) Entering air temperature: 20°C d.b.
In/Out water temperature: 70°C / 60°C
Max speed
- (3) Nominal data measured with casing ref. AMCA210-74 standards and plenum + diaphragm ref. CNR-UNI10023 standards.
- (6) Free field sound pressure, 3 m distance. Data calculated based on sound power measured in riverberation room ref. ISO 3741 - ISO 3742 standards.
- (1)(2)(3)(4)(5) Nominal technical data , refer air flow (3) to the max speed and unit with free air flow
- (*) DN: Nominal diameter; F= Female gas water coil connections; M= Male connection

- (1) Temperatura intrare aer
Temperatura apa intrare/iesire
Viteza max
- (2) Temperatura intrare aer
Temperatura apa intrare/iesire
Viteza max
- (3) Date nominale calculate cu cascasa standard ref. AMCA210-74 si plenum+diaphragma standard CNR-UNI10023
- (6) Nivel de zgomot in camp deschis, distanta 3 m. Datele au la baza puterea sonora masurata in camera standard de reverberatie ref. ISO3741-ISO3742
- (1)(2)(3)(4)(5) Date tehnice nominale, debit de referinta max (3) si unitate in camp deschis
- (*) DN= Diametru nominal, F= conexiune baterie gaz apa filet interior; M= Mascul



S
Versiune necarcasata - Panou simplu
Concealed version - Single panel



D
Versiune necarcasata aparenta - Panou dublu prevopsit
With cabinet version - Double panel

VERSIUNE / VERSION "S"

HCNA		71	117	143	165	216	290	240	293	330	565	685
A1	mm	360	425	425	480	550	550	425	425	480	580	580
B1	mm	560	660	760	760	1.160	1.360	1.160	1.360	1.360	1.660	1.660
C1	mm	840	995	1.105	1.160	1.140	1.240	995	1.105	1.160	1.450	1.450
Greutate/Weight	kg	35,8	46,6	55,7	60,6	93,7	107,8	78,5	94,8	103,5	179,1	181,1

VERSIUNE / VERSION "D"

HCNA		71	117	143	165	216	290	240	293	330	565	685
A	mm	380	440	440	480	570	570	440	440	480	600	600
B	mm	520	620	720	720	1.120	1.320	1.120	1.320	1.320	1.620	1.620
C	mm	870	1.020	1.120	1.160	1.150	1.250	1.020	1.120	1.160	1.470	1.470
Peso/Weight	kg	45,1	59,5	71,3	77,3	118,9	138,7	99,7	121,4	131,4	224,4	226,4

VERSIUNE / VERSION "S" - CU BATERIE ADITONALA / HOT WATER EXCHANGER

HCNA		71	117	143	165	216	290	240	293	330	565	685
A1	mm	360	425	425	480	550	550	425	425	480	580	580
B1	mm	560	660	760	760	1.160	1.360	1.160	1.360	1.360	1.660	1.660
C1	mm	840	995	1.105	1.160	1.140	1.240	995	1.105	1.160	1.450	1.450
Peso/Weight	kg	40,2	52,1	62,3	67,2	104,7	123,8	89,5	110,8	119,5	203,1	205,1

VERSIUNE / VERSION "D" - CU BATERIE ADITONALA / HOT WATER EXCHANGER

HCNA		71	117	143	165	216	290	240	293	330	565	685
A	mm	380	440	440	480	570	570	440	440	480	600	600
B	mm	520	620	720	720	1.120	1.320	1.120	1.320	1.320	1.620	1.620
C	mm	870	1.020	1.120	1.160	1.150	1.250	1.020	1.120	1.160	1.470	1.470
Peso/Weight	kg	49,5	65,0	77,9	83,9	129,9	154,7	110,7	137,4	197,4	248,4	250,4



<p>BC</p>	<p>Baterie apa calda suplimentar pentru sistem 4 tevi in 2 randuri Auxiliary heating coil, 2 rows</p>
<p>MOR-TMB⁽¹⁾</p>	<p>Terminal "Mammut" + Termostat minima temperatura apa calda Tset 32°C Mammoth type terminal board + water low temperature thermostat</p>
<p>CRA^{*(2)}</p>	<p>Termostat de perete 230V - Relee 5A/230V. Selector 3 viteze ventilator + Selector Pornit-Oprit + Gestiune sistem 2 tevi cu sau fara 1 vana On/Off 230V / 230V wall thermostat. 3 speeds fan selector + Off/On selector + 2 pipes plant management with or without 230V on-off valves</p>
<p>CRB^{*(2)}</p>	<p>Termostat digital de perete 230V/24V cu relee 3A/230V. Selector 3 viteze ventilator + Mod Auto + Gestiune sistem 2 sau 4 tevi cu sau fara vane On/Off, PWM, 3 puncte, rezistente/ 230V/24V wall digital thermostat. 3 ways and auto selector + 2 or 4 pipes plant management with or without on-off valves, PWM, 3 points, electrical heaters</p>
<p>CBP^{*(2)}</p>	<p>Termostat digital de perete 230V/24V cu relee 3A/230V. Ventilator On/Off si brushless, Gestiune sistem 2 sau 4 tevi cu sau fara vane On/Off sau 0..10V alimentare 230 V sau 24 V / Digital wall thermostat 230V/24V. On-off or brushless fan, 2 or 4 pipes plant management with or without on-off valve or 0..10V with 230V or 24V alimentation.</p>
<p>CRI</p>	<p>Termostat electronic incastat programabil 230 V - relee 3A/230V. Start/stop + selector 3 trepte de viteze + selector Vara/larna. Gestiune sistem 2 sau 4 tevi cu 1 vana on/off alimentata 230V. Necesas piesa decorativa B-Ticino LIVING sau AVE Sistema 45 sau Vimar Idea / Programable 230V ducted electronic thermostat - Relay contacts 3A/230V. Start-Stop + 3-speeds fan selector + heat/cool selector. 2 pipes plant management with or without on-off valve with 230V alimentation. Cover requested B-Ticino LIVING or AVE System 45 or Vimar Idea.</p>
<p>TEL*</p>	<p>Placa principala + senzor aer + senzor apa + receptor infrarosu + telecomanda infrarosu (control sistem 2 sau 4 tevi, cu sau fara vane).. Ventilator 7A-230Vac. Vane: 2A-230Vac. Motherboard + Air sensor + Water sensor - I.R. reciever + I.R. Remote control (control 2-4 pipe units, with/without valves). Fan 7A-230Vac. Valves: 2A-230Vac.</p>
<p>SDI.4X3A</p>	<p>Releu cu 4 iesiri de 3A (posibilitate de control pana la 4 motoare cu 3 viteze de 3A, ex. 4 ventiloconvectoare mici gen VE) Card with 4 by 3A output (suitable to control up to max No. 4 3-Speed 3A motors ; ex. No. 4 small fan-coils) Contacte-Contacts: 4x 3(0,3)A 230Vac</p>
<p>SDI.2X10A*</p>	<p>Releu cu 2 iesiri de 10A (posibilitate de control pana la 2 motoare cu 3 viteze de 10A, ex. 1 ventiloconvector mare gen HCN sau HCNA) Card with 2 by 10A output (suitable to control up to max No. 2 3-Speed motors of 10A ; ex. No. 1 large unit with 2 motors) Contacte-Contacts: 2x 10A-230Vac</p>
<p>PFA-S PFA-D</p>	<p>Sectiune filtrare ductabila + filtru aer plat EU3 (S=panou zincat simplu, D=panou dublu prevopsit) Ductable air filter section + flat air filter, EU3 filtering level (S=single skin panel made of galvanized steel, D=double skin panel pre-painted)</p>
<p>PFO-S PFO-D</p>	<p>Sectiune filtrare ductabila + filtru aer ondulat EU5 H=100mm INALTA EFICIENTA (S=panou zincat simplu, D=panou dublu prevopsit) Ductable air filter section + HIGH EFFICIENCY undulated air filter H=100mm, EU5 filtering level (S=single skin panel made of galvanized steel, D=double skin panel pre-painted)</p>
<p>PFT-S PFT-D</p>	<p>Sectiune filtrare ductabila + filtru aer ondulat EU7 H=400mm INALTA EFICIENTA (S=panou zincat simplu, D=panou dublu prevopsit) Ductable air filter section+VERY HIGH EFFICIENCY POCKET BAGS air filter h=400mm with EU7 filtering level (S=single skin panel made of galvanized steel, D=double skin panel pre-painted)</p>

*AVERTIZARE: verificați dacă absorbția electrică a motoarelor unităților este compatibilă cu gradul de contact al telecomenzii. Dacă absorbția electrică este mai mare sau dacă unitatea este prevăzută cu 2 motoare, este recomandat să utilizați interfața SDI.

*WARNING: verify if the electrical absorption of the units motors are compatible with the remote control contact rating. If the electrical absorption is higher, or the unit is provided with 2 motors, it's recommended to use SDI chart.

(1) Toate unitatile HCN au inclus terminalul "Mammut", fara termostat. / All HCNA units are supplied with standard Mammoth type terminal board, without thermostat.

(2) Fiecare panou poate controla o singura unitate (vezi accesoriul "SDI"). / Each control panel can control only one unit (see accessory "SDI").



<p>PMA-S PMA-D</p>	<p>Camera de amestec aer proaspat (0-33%) / recirculare (100-67%) sau viceversa (cuplate la comenzi manuale sau motorizate (S=panou zincat simplu, D=panou dublu prevopsit)</p> <p>External/internal mixing section "external air 0-33% - internal air 100-67%" (S=single skin panel made of galvanized steel, D=double skin panel pre-painted)</p>
<p>P2S-S P2S-D</p>	<p>Secțiune închisă + 2 clapete de reglare / ajustare (1 prag de dedesubt + 1 pârghie pe partea din spate) - Clapete fără comenzi - pot fi control manuale sau motorizate (S=panou zincat simplu, D=panou dublu prevopsit)</p> <p>Closed section +2 regulation/adjustment louvers (1 louver below + 1 louver on the rear side). Louvers without controls, can be either manual or motorized control. (S=single skin panel made of galvanized steel, D=double skin panel pre-painted)</p>
<p>MS</p>	<p>Servomotor 230V on/off clapeta aer Motor "230Vac on-off" suitable for air damper</p>
<p>P90-S P90-D</p>	<p>Secțiune 90° S=panou zincat simplu, D=panou dublu prevopsit</p> <p>90° section (S=single skin panel made of galvanized steel, D=double skin panel pre-painted)</p>
<p>PCR-S PCR-D</p>	<p>Plenum izolat din otel zincat cu racorduri circulare "Ø", S=panou zincat simplu, D=panou dublu prevopsit)</p> <p>Steel section with spigots "Ø", internal insulation. (S=single skin panel made of galvanized steel, D=double skin panel pre-painted)</p>
<p>PSL-S PSL-D</p>	<p>Atenuator de zgomot (pentru aspiratie sau refulare) (S=panou zincat simplu, D=panou dublu prevopsit)</p> <p>Labyrinth noise level attenuator section, suitable for both air intake/supply outlets (S=single skin panel made of galvanized steel, D=double skin panel pre-painted)</p>
<p>PMP</p>	<p>Pompa de condens cu vas de acumulare 0,5 li 4A (250V)</p> <p>Condensate pump including 0,5 litres condensate tank, provided with 4A (250V)</p>
<p>BMS-U1-V</p>	<p>Placa principala cu comunicare integrata pentru sistem BMS</p> <p>Main card with integrated communication</p>
<p>BMS-U1-V</p>	<p>Scheda principale con comunicazione integrata</p> <p>Main card with integrated communication</p>
<p>SND-A2</p>	<p>Senzor temperatura aer (obligatoriu pentru fiecare placa BMS)</p> <p>Air temperature sensor (compulsory per each BMS main card)</p>
<p>SND-W2</p>	<p>Senzor de temperatura apa VARA/IARNA</p> <p>SUMMER/WINTER Water temperature sensor</p>
<p>CD6</p>	<p>Panou de comanda de perete digital</p> <p>Wall mounted external digital control</p>

CARACTERISTICI BATERIE - COIL CHARACTERISTICS

HCNA		71	117	143	165	216	290	240	293	330	565	685
Bateria cald/rece Heat/cool coil	Caracteristici Kvs Kvs characteristic	2,33	3,78	4,58	5,65	6,65	9,00	8,22	9,91	11,04	16,36	19,73
	Racorduri DN User side connection DN	3/4" M	1" M	1" M	1" M	1"-1/4 M	1"-1/2 M	1"-1/4 M	1"-1/2 M	1"-1/2 M	1"-1/2 M (4R)	1"-1/2 M (4R)
Bateria aditionala Heat coil	Caracteristici Kvs Kvs characteristics	1,66	2,56	3,23	3,94	4,64	6,46	5,73	7,14	7,98	9,67	11,53
	Racorduri DN User side connection DN	3/4" M	1" M	1" M	1" M	1"-1/4 M	1"-1/4 M	1"-1/4 M	1"-1/4 M	1"-1/4 M	1"-1/4 M	1"-1/4 M

CARACTERISTICI VANE - VALVE CHARACTERISTICS

Vana 3 cai 3-way valve	(1) Fiecare kit include un servomotor (1) Every single kit includes 1 intercept valve only			
3V / 3VM	DN 3/4" Kvs 2,8	DN 1" Kvs 5,2	DN 1 1/4" Kvs 13,0	DN 1 1/2" Kvs 16,0
Valvoavana 2 cai 2-way valve	(1) Fiecare kit include un servomotor (1) Every single kit includes 1 intercept valve only			
2V / 2VM	DN 3/4" Kvs 2,8	DN 1" Kvs 5,2	DN 1 1/4" Kvs 13,0	DN 1 1/2" Kvs 16,0

(1) Ogni singolo kit valvole è compatibile con qualsiasi taglia di unità HCNA. In ogni caso:
 - per valvole on-off è consigliato usare valvole con alto Kvs
 - per valvole modulanti è consigliato usare valvole con Kvs confrontabile con il Kvs della batteria

(1) Each valve kit is suitable for any HCNA unit size. Anyway:
 -with on-off valve it is recommended to use valves with high Kvs
 -with modulating valves it is recommended to use valves with Kvs comparable with the one of the coil



3V-2,8
3V-5,2
3V-13
3V-16

Vana cu 3 cai si servomotor 230V
 3-way valve with actuator 230V

3VM-2,8
3VM-5,2
3VM-13
3VM-16

Vana cu 3 cai si servomotor 24Vac, semnal modulat 0..10V
 3-way valve with actuator 24Vac, modulating signal 0-10V



2V-2,8
2V-5,2
2V-13
2V-16

Vana cu 2 cai si servomotor 230V
 2-way valve with actuator 230V

2VM-2,8
2VM-5,2
2VM-13
2VM-16

Vana cu 2 cai si servomotor 24Vac, semnal modulat 0..10V
 2-way valve with actuator 24Vac, modulating signal 0-10V

Bateria unităților HCNA (sistem 4 tevi) necesită vane de același tip. Deci, sistemul cu 4 tevi are nevoie de 2 vane (2 coduri)
 The heat coil of HCNA units (4-pipes system) require the same type valves. So the 4-pipes system need n°2 valves (n° 2 codes)



MB*

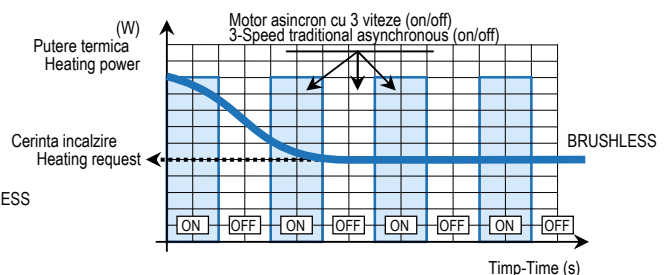
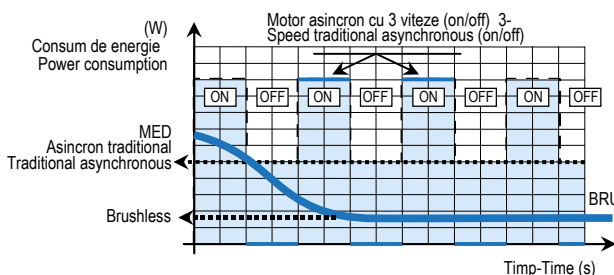
Motor brushless cu reglaj continuu al debitului de aer (semnal 0..10Vdc)

- 50% consum de energie electrica
- 50% emisii CO₂
- 50% nivel de zgomot

Brushless motor with continuous variation 0-100% of the air flow (signal 0.10 Vdc)

- 50% yearly energy consumption
- 50% CO₂ emissions
- 50% noise level

Un accesoriu esențial pentru funcționarea unei unități cu motor fără perie este controlerul cu semnal de control moduland 0..10 Vdc, CBP
 An essential accessory for the operation of a unit with Brushless motor is the controller with modulating control signal 0.10 Vdc, accessory CBP.



*MB nu se conectează împreună cu TEL
 *MB should not be combined with accessory TEL