Rooftop unit cooling and heating

HAN

9.8-31.0 kW

410A

9.6-30.5 kW

Scroll

Technical features

- Cooling Capacity from 9.8 to 31 kW
- Heating Capacity from 9.6 to 30.5 kW
- Refrigerant: R410A
- Sizes: 6

Product Advantages

- A coaxial heat exchanger robust in presence of loade
- Weather resistant casing with external panels and drain pan coated with powder-based epoxy paint colour RAL 7040
- Base rail with forklift slots to facilitate transportation and handling.
- Technical compartment independent from airstreams allowing service works to be performed without disturbing the unit operation
- High EER and environmentally freindly refrigerant R410A with zero ODP (Ozone Depleting Potentila)
- High efficiency scroll compressor with crankcase heater
- Condenser coils with hydrophilic coated fins to improve removal of water droplets during defrost cycles
- Standard microprocessor-based control by CAC controller

Main options and accessories

- G2/ M1 filter
- Factory-fitted low ambient temperature control to ensure cooling operation down to -10°C outdoor temperature (All-season)
- Synthetic air filter
- Electric heater
- Programmable controlller RCW2 to control up to 15 units with independent set points and programming

Operating limit (for standard unit) (to be confirmed following selection software issue)

Cooling mode	
Minimum indoor air temperature	21°C DB/15°C WB
Maximum indoor air temperature	32°C DB/23°C WB
Minimum outdoor air temperature/with all-season kit	15°C DB/-10°C
Maximum outdoor air temperature	50°C DB
Heating mode	
Maximum indoor air temperature	27°C DB
Minimum outdoor air temperature	-10°C
Maximum outdoor air temperature	24°C (16°C for HAN 25)

Technical feature

HAN			HAN 13	HAN 15	HAN 17	HAN 19	HAN 25	HAN 31
Cooling	Cooling capacity	kW	13,0	14,5	16,8	18,9	25,4	31,0
	Power input	kW	4,5	4,9	6,0	6,5	8,3	10,0
	EER		2,88	2,95	2,8	2,9	2,95	3,1
Heating	Heating capacity	kW	12,1	14,2	15,8	19,0	24,2	30,5
	Power input	kW	4,3	4,5	5,7	6,0	8,8	9,5
	COP		2,8	3,1	2,7	3,1	2,75	3,2
Compressors								
Type			Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Number			1	1	1	1	1	1
Ventilation								
Available static pressure		Pa	100	170	160	210	240	250
Airflow	Indoor fan	m^3/h	2,640	2,940	3,190	3,860	4,780	5,530
	Outdoor fan	m^3/h	9,000	9,000	9,000	9,000	12,000	12,000
Sound Levels*								
Lw Outdoor (Configuration A)		dB(A)	80,7	79,3	79,3	83,1	84,9	86,4
Sound pressure Lp calculated at 1 m		dB(A)	76,9	75,5	75,5	79,3	81,1	82,6
Sound pressure Lp calculated at 5 m		dB(A)	74,8	73,4	73,4	77,2	79,0	80,5
Lw Indoor (Configuration B)		dB(A)	77,1	75,0	75,0	72,7	78,2	82,7
Sound pressure Lp calculated at 1 m		dB(A)	73,3	71,2	71,2	68,9	74,4	78,9
Sound pressure Lp calculated at 5 m		dB(A)	71,2	69,1	69,1	66,8	72,3	76,8
Power Supply								
Power supply			400V/3N-/50Hz					
Fuse rating am		A	16	20	20	25	32	32
Dimensions								
LxWxH		mm	1,320 x 1,345 x 905				1,420 x 1,445 x 1,320	
Weight								
Unit weight		kg	219	223	223	243	320	343

* Pressure sound level calculated according the following:

$$Lp = Lw + 10\,Log\left(\frac{Q}{4\pi D^2} + \frac{4}{A}\right)$$

Factor Q	2	2 = free field, 4 = against wall, 8 = on corner		
V	100	Room volume in m^3 (on example, V = 100 m^3)	Lg =	10
T	1	Reverberation time in s	lg =	10
A	16	A = 0,16 x (V/T)	Ht =	2,5
D		Distance in m		