Ducted inverter reverse cycle air conditioning

What is ducted inverter reverse cycle air conditioning?

Ducted inverter reverse cycle air conditioning is an ideal solution for whole-of-home or office cooling or heating.

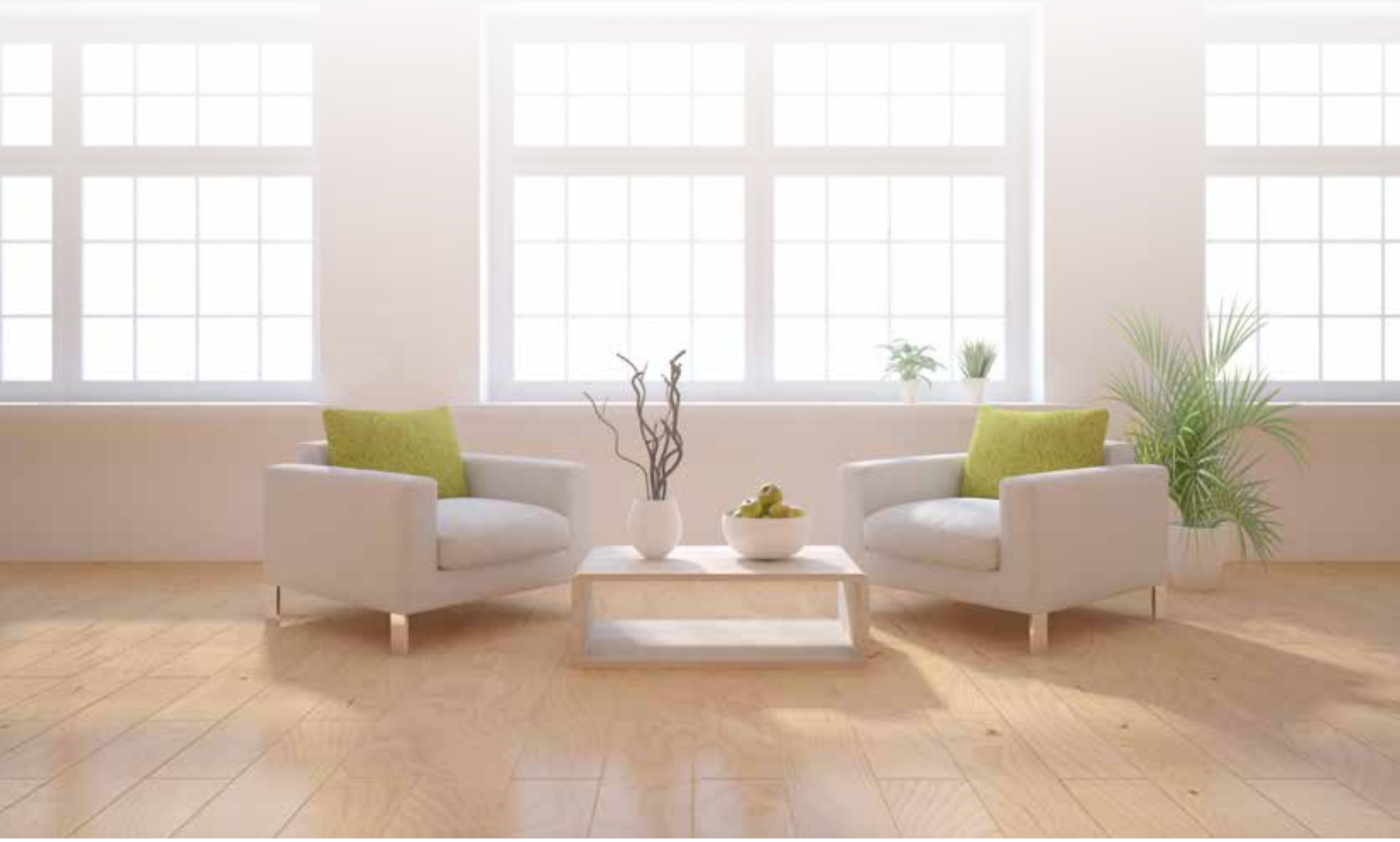
Ducted reverse cycle air conditioning consists of an indoor unit and an outdoor unit.

The indoor unit is placed within the roof space and is connected to a series of outlets within the house via ductwork. Depending on the climate function selected, warm or cool air is circulated to all rooms via vents in the ceiling.

Braemar ducted systems can be designed to operate in different zones which can be cooled or heated at different times, saving money on energy costs.

The inverter technology ensures an uninterrupted comfort and significant savings in running costs (see page 6 for more information).

Braemar's superior range of Minimum Energy Performance Standard (MEPS) compliant systems includes seven inverter models. The inverter range has five models from 7.0 kW to 16.0 kW single phase, and two 23.5 kW and 26.5 kW three phase models.



Smart controller features and benefits

Ducted inverter single phase

LCD backlit display
For visibility at night.

5 modes
Auto, cool, dry, fan, heat.

7 fan settings
Auto, low, medium low, medium, medium high, high, super high.

Sleep function
Adjusts temperature up or down a few degrees during the night. Reduces energy usage while you sleep.

Vacation function
Prevents the temperature dropping below 8°C while you are away on holidays.

Quiet function
Reduces fan speed to ensure air conditioner runs quietly.

Memory function (if a power failure occurs)
Automatically restarts and resumes the settings.

Turbo function
Ultra high fan speed to quickly cool your home.

Energy-saving function
Change the pre-set upper and lower temperatures. Perfect for apartments to reduce energy usage.

Blow function (in cooling mode)
Extends the time the fan continues to run after the cooling set point temperature is met.

Defrosting function
Auto function to ensure optimum heating even in the iciest environments.

Filter clean remind
Automatically reminds you when the filter needs cleaning.

Timer
Delay the on/off of your air conditioner to save you money.

Child lock
Children are unable to change settings.

Error code display
Assists in fault identification and troubleshooting. Also displays when DRED is in operation.

Read ambient outdoor temperature
Understand how well the unit is functioning.

Ducted inverter three phase

LCD display

5 modes
Auto, cool, dry, fan, heat.

4 fan settings
Auto, low, medium, high.

Quiet function (reduces fan speed)
Ensures air conditioner runs quietly.

Memory function (if a power failure occurs)
Automatically restarts and resumes the settings.

Filter clean remind
Automatically reminds you when the filter needs cleaning to save you money.

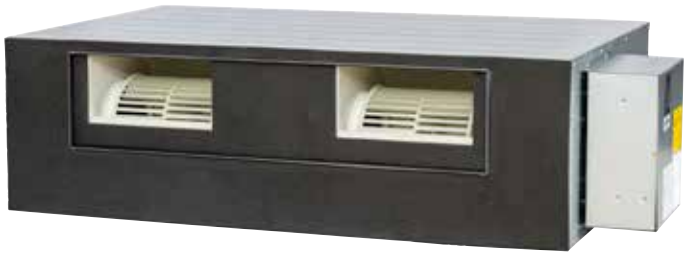
Timer
Delay the on/off of your air conditioner to save you money.

Child lock
Ensure controller is locked so that children are unable to change settings.

Ducted inverter reverse cycle air conditioning

Indoor unit features and benefits

Ducted inverter single phase



Built in drain pump and low profile design

Allows more flexibility in placing an indoor unit.

Wide ESP range, 0 – 200 Pa, 9 settings adjustable from wired controller, STD 50 Pa

The installer can tailor the airflow to your own home to ensure the most efficient and quiet operation.

2 core signal cable to outdoor unit (non polarity)

Allows quicker installation.

Outside air (fan or damper) control from indoor PCB*

Provides additional fresh air.

DC fan motor

Saves you money by reducing running costs.

Screw connect electrical terminals

Ensures that electrical connection is reliable so you remain comfortable.

Remote On/Off external connections*

Applications that require connection to a Building Management System (BMS), or require a room card.

Motion sensor input*

Saves money and energy by turning the system off while you are away.

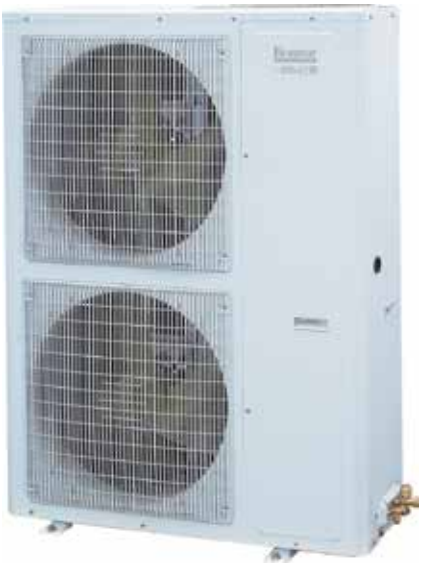
MODBUS compatible

Allows operation with a wide range of home automation systems.

*Ideal for commercial applications

Outdoor unit features and benefits

Ducted inverter single phase



DRED (RJ45 connector)
Saves power in peak usage times,
refer to page 5 for more information.

Long pipe runs (50 m)
Allows more flexibility in placing an outdoor unit.

Single drain connection
Allows faster installation.

DC fan motor and DC compressor
Saves you money by reducing running costs.

Slim design
Allows more flexibility in placing an outdoor unit.

Screw connect electrical terminals
Ensures that electrical connection is reliable so you remain comfortable.

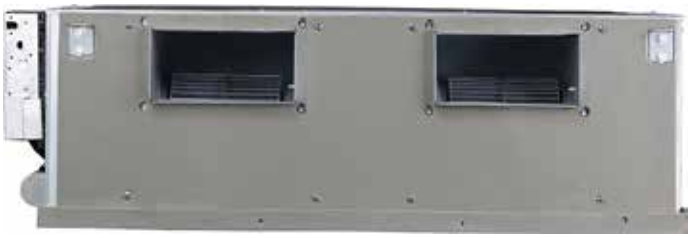
Wide outdoor operating range
Cool: -15 °C to 48 °C,
Heat: -10 °C to 24 °C.
With system properly designed
- you and your family will remain
comfortable in extreme conditions.

5 YEAR COMPREHENSIVE WARRANTY
MEPS COMPLIANT
DRED FEATURE

Ducted inverter reverse cycle air conditioning

Indoor unit features and benefits

Ducted inverter three phase



Low profile
Allows more flexibility in placing an indoor unit.

Wide ESP range, 0 – 200 Pa, 5 settings, STD 50 Pa
The installer can tailor the airflow to your own home to ensure most efficient and quiet operation.

3 core shielded signal cable to outdoor unit
Allows for quick installation.

Remote On / Off control*
Applications that require connection to a Building Management System (BMS), or require a room card.

DRED
Saves power in peak usage times, refer to page 5 for more information.

Alarm output
Ideal for commercial applications that require notification of equipment fault.

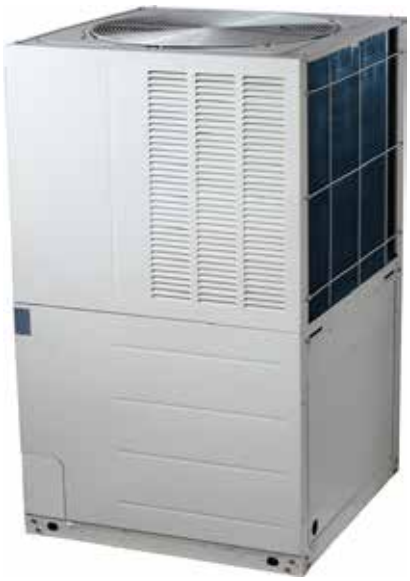
DC fan motor
Saves you money by reducing running costs.

Screw connect electrical terminals
Ensures that electrical connection is reliable so you remain comfortable.

*Ideal for commercial applications

Outdoor unit features and benefits

Ducted inverter three phase



Long pipe runs (50 m)
Allows more flexibility in placing an outdoor unit.

Single drain connection
Allows faster installation.

DC fan motor and DC compressor
Saves you money by reducing running costs.

Top fan discharge
Ideal for installation in tight spaces.

Slim design
Allows more flexibility in placing an outdoor unit.

Screw connect electrical terminals
Ensures that electrical connection is reliable so you remain comfortable.

Wide outdoor operating range
Cool: 15 °C to 48 °C,
Heat: -15 °C to 24 °C.
With system properly designed - you and your family will remain comfortable in extreme conditions.

5 YEAR COMPREHENSIVE WARRANTY

MEPS COMPLIANT

DRED FEATURE

Ducted inverter reverse cycle air conditioning

Ducted inverter single phase specifications

Indoor unit

Outdoor unit

Model No.	Indoor unit	SDHV07D1S	SDHV10D1S	SDHV12D1S	SDHV14D1S	SDHV16D1S
	Outdoor unit	SCHV07D1S	SCHV10D1S	SCHV12D1S	SCHV14D1S	SCHV16D1S
Capacity	Cooling (kW)	7.0 (2.40~9.50)	10.0 (3.20~11.00)	12.0 (4.00~13.50)	13.7 (6.00~14.50)	16.0 (6.40~17.00)
	Heating (kW)	8.0 (2.40~10.00)	12.0 (2.90~13.00)	13.8 (4.00~15.00)	16.0 (5.20~17.00)	18.0 (5.30~19.50)
AEER / ACOP	W / W (tested)	3.11 / 3.45	3.23 / 3.53	3.21 / 3.34	3.24 / 3.34	3.16 / 3.66
EER / COP	W / W (rated)	3.21 / 3.51	3.23 / 3.64	3.24 / 3.45	3.22 / 3.33	3.20 / 3.60
Power supply	Indoor & outdoor (V / Ph / Hz)	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50
Power input	Cooling (kW)	2.18 (0.85~2.50)	3.10 (0.70~4.50)	3.70 (0.65~4.70)	4.25 (1.40~5.6)	5.00 (1.20~6.9)
	Heating (kW)	2.28 (0.80~2.75)	3.30 (0.70~4.60)	4.00 (1.30~5.50)	4.80 (1.30~5.5)	5.00 (1.20~6.90)
Current input (max.)	Cooling / heating indoor (A)	1	1	1	2	2
	Cooling / heating outdoor (A)	16	19	21	28	31
Indoor unit	Rated airflow @ 50 Pa (L/s)	417	556	611	694	861
	Range (9 settings) Pa	0-200	0-200	0-200	0-200	0-200
	Rated speed (min/max)	S09 (S05 to S13)	S09 (S05 to S13)	S09 (S05 to S13)	S09 (S05 to S13)	S09 (S05 to S13)
	Duct flange S/A (mm)	820 x 160	850 x 190	850 x 190	850 x 190	990 x 190
	Duct flange R/A (mm)	980 x 230	950 x 315	950 x 315	950 x 315	1150 x 345
	Sound pressure level (dB(A))	40~47	42~50	43~52	46~54	47~55
	Dimensions (W × H × D), outline (mm)	1220 × 290 × 790	1340 × 350 × 750	1340 × 350 × 750	1340 × 350 × 750	1497 × 389 × 799
	Net / Gross weight (kg)	47 / 55	56 / 68	59 / 70	59 / 71	79 / 103
Outdoor unit	Sound pressure level (dB(A))	56	60	60	61	61
	Dimensions (W × H × D) (mm)	980 × 790 × 427	1107 × 1100 × 440	1107 × 1100 × 440	1085 × 1365 × 427	1085 × 1365 × 427
	Net / Gross weight (kg)	69 / 74	91 / 100	101 / 111	117 / 128	121 / 133
Refrigerant charge	R410A (kg)	2.2	3.5	3.9	4.0	5.5
Pipe	Liquid size (mm)	9.53 (3/8)	9.53 (3/8)	9.53 (3/8)	9.53 (3/8)	9.53 (3/8)
	Gas size (mm)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)	19.05 (3/4)
	Pre-charge length (m)	7.0	7.0	7.0	9.5	9.5
	Additional charge (g/m)	60	60	60	60	60
	Max. distance height / length (m)	15 / 50	15 / 50	30 / 50	30 / 50	30 / 50
Electrical	Indoor to outdoor (mm^2)	2 x 0.75 non shielded (H05RN-F)	2 x 0.75 non shielded (H05RN-F)	2 x 0.75 non shielded (H05RN-F)	2 x 0.75 non shielded (H05RN-F)	2 x 0.75 non shielded (H05RN-F)
	Power to indoor (mm^2)	3 x 1.0 (H05RN-F)	3 x 1.0 (H05RN-F)	3 x 1.0 (H05RN-F)	3 x 1.0 (H05RN-F)	3 x 1.0 (H05RN-F)
	Power to outdoor (mm^2)	3 x 2.5 (H07RN-F)	3 x 4.0 (H07RN-F)	3 x 4.0 (H07RN-F)	3 x 6.0 (H07RN-F)	3 x 6.0 (H07RN-F)
	Recommended fuse (amp) - indoor	6	6	6	6	6
	Recommended fuse (amp) - outdoor	20	25	25	40	40
Set temperature range	°C	16~30	16~30	16~30	16~30	16~30
Ambient temperature range	Cooling (°C)	-15~48	-15~48	-15~48	-15~48	-15~48
	Heating (°C)	-10~24	-10~24	-10~24	-10~24	-10~24

Ducted inverter three phase specifications

Indoor unit

Outdoor unit

Model No.	Indoor unit	SDHV22B1S	SDHV26B1S
	Outdoor unit	SCHV22B3S	SCHV26B3S
Capacity	Cooling (kW)	23.5 (8.86~26.60)	26.5 (10.00~30.00)
	Heating (kW)	25.5 (12.31~28.30)	26.5 (13.00~30.00)
AEER / ACOP	W / W (tested)	3.23 / 3.29	3.11 / 3.29
EER / COP	W / W (rated)	3.36 / 3.38	3.23 / 3.31
Power supply	Indoor (V / Ph / Hz)	220-240 / 1 / 50	220-240 / 1 / 50
	Outdoor (V / Ph / Hz)	380-415 / 1 / 50	380-415 / 1 / 50
Power input	Cooling (kW)	7.00 (2.05~8.57)	8.20 (2.40~9.80)
	Heating (kW)	7.55 (3.20~9.24)	8.00 (3.40~9.80)
Current input (max.)	Cooling / heating indoor (A)	4.5	4.5
	Cooling / heating outdoor (A)	16	16
Indoor unit	Rated airflow @ 50 Pa (L/s)	1389	1389
	Range (9 settings) Pa	0-200	0-200
	Rated speed (min/max)	5 Settings	5 Settings
	Duct flange S/A (mm)	800 x 200	800 x 200
	Duct flange R/A (mm)	1145 x 395	1145 x 395
	Sound pressure level (dB(A))	56	56
	Dimensions (W × H × D), outline (mm)	1470 x 510 x 795	1470 x 510 x 795
	Net / Gross weight (kg)	83 / 92	83 / 92
Outdoor unit	Sound pressure level (dB(A))	66	66
	Dimensions (W × H × D) (mm)	948 x 1585 x 968	948 x 1585 x 968
	Net / Gross weight (kg)	231 / 256	231 / 256
Refrigerant charge	R410A (kg)	10	10
Pipe	Liquid size (mm)	12.70 (1/2)	12.70 (1/2)
	Gas size (mm)	28.60 (1,1/8)	28.60 (1,1/8)
	Pre-charge length (m)	5	5
	Additional charge (g/m)	120	120
	Max distance height / length (m)	30 / 50	30 / 50
Electrical	Indoor to outdoor (mm^2)	3 x 0.75 Shielded (HO5RN-F)	3 x 0.75 Shielded (HO5RN-F)
	Power to indoor (mm^2)	3 x 2.5 (HO7RN-F)	3 x 2.5 (HO7RN-F)
	Power to outdoor (mm^2)	5 x 6.0 (HO7RN-F)	5 x 6.0 (HO7RN-F)
	Recommended fuse (amp) - indoor	16	16
	Recommended fuse (amp) - outdoor	40	40
Set temperature range	°C	17~30	17~30
Ambient temperature range	Cooling (°C)	15~48	15~48
	Heating (°C)	-15~24	-15~24