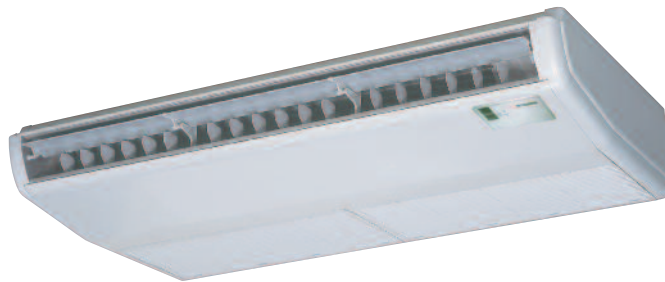


FDEN-X hyper inverter

FDEN-X (4.0-14.0 kW)

FDEN-X: World class energy efficiency and performance is combined with all of the latest advances in commercial air conditioner technology in the FDEN-X Hyper Inverter ceiling mounted range. Our new twin rotary compressor and low resistance design of the indoor unit offers some of the most energy efficient cooling and heating available. Wired control or infra red remote control options are available, while the extensive 100m pipe length allows flexible installation.



FDEN 40/50/60/71/100/125/140 VD

Wired remote control



RC-E5 (option)



RCH-E3 (option)

Wireless remote control



RCN-E1R (option)



SRC 40/50/60 ZJX-S

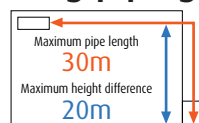


FDC71VNx

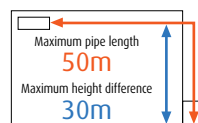


FDC 100/125/140 VN(S)X

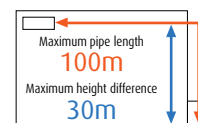
Long piping



FDEN 40/50/60 VD



FDEN1VD

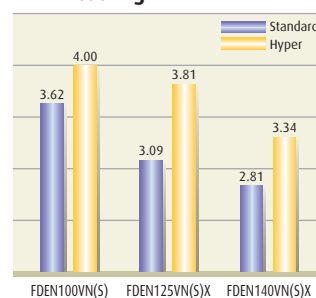


FDEN 100/125/140 VD

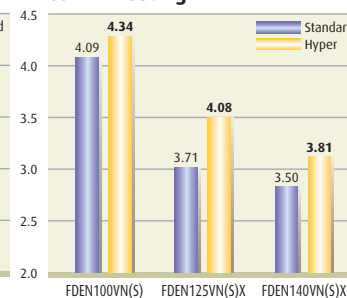
EER and COP levels

World class energy efficiency with the industry's highest CoP's is one of the main features of the new hyper inverter range. New twin rotary compressors, low resistance indoor unit design and increased heat exchanger efficiency make the hyper inverter range some of the most energy efficient cooling and heating systems available today.

EER in Cooling

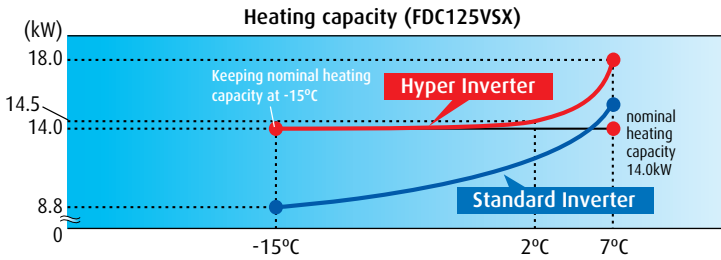


COP in Heating



Powerful heating in cold conditions

Optimizing refrigerant control with electronic expansion valves, combined with new twin rotary compressors, has allowed increased maximum heating capacity. The hyper inverter range can reach the heating set point very quickly and can maintain full heating capacity with an outdoor temperature down to -15°C.

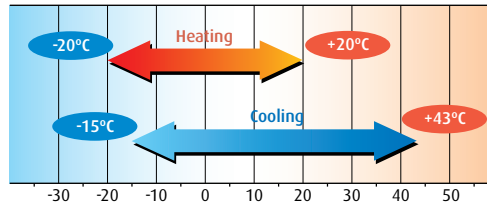


Model name	nominal heating capacity (kW at outdoor temperature of 7°C)	Heating capacity at outdoor temperature of -15°C
FDC 100 VN(S)X	11.2kW	11.2kW
FDC 125 VN(S)X	14.0kW	14.0kW
FDC 140 VN(S)X	16.0kW	16.0kW

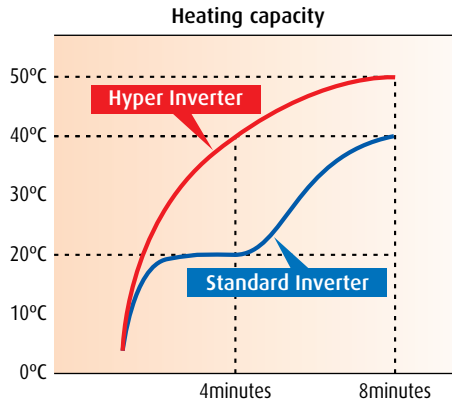
High performance heating (FDC 71/100/125/140 VN(S)X)

-20°C : Heating operation down to -20°C

-15°C : Nominal heating capacity maintained at -15°C



Temperature of supply air can reach 40°C in 4 minutes after start up under low temperature operation conditions (at both indoor and outdoor temperature of 2°C) and can reach 50°C in 8 minutes after that.



INDOOR UNIT		FDEN40VD	FDEN50VD	FDEN60VD	FDEN71VD	FDEN100VD	FDEN100VD	FDEN125VD	FDEN125VD	FDEN140VD	FDEN140VD
OUTDOOR UNIT		SRC40ZJX-S	SRC50ZJX-S	SRC60ZJX-S	FDC71VNX	FDC100VNX	FDC100VSX (3 phase)	FDC125VNX	FDC125VSX (3 phase)	FDC140VNX	FDC140VSX (3 phase)
WIRED CONTROLLER		RC-E5	RC-E5	RC-E5	RC-E5	RC-E5	RC-E5	RC-E5	RC-E5	RC-E5	RC-E5
Cooling (Nominal)	kW	4.0	5.0	5.6	7.1	10.0	10.0	12.5	12.5	14.0	14.0
Cooling Range	kW	1.1 to 4.7	1.1 to 5.6	21.1 to 6.3	3.2 to 8.0	4.0 to 11.2	4.0 to 11.2	5.0 to 14.0	5.0 to 14.0	5.0 to 16.0	5.0 to 16.0
UK Cooling	kW	3.8	4.8	5.4	6.7	9.5	9.5	11.8	11.8	13.2	13.2
UK Sensible Cooling	kW	3.0	3.3	4.6	5.1	6.8	6.8	8.2	8.2	8.7	8.7
E.E.R (Energy Label)		3.92 (A)	3.27 (A)	3.15 (B)	3.36 (A)	3.57 (A)	3.57 (A)	3.24 (A)	3.24 (A)	2.81 (C)	2.81 (C)
Heating (Nominal)	kW	4.5	5.4	6.7	8.0	11.2	11.2	14.0	14.0	16.0	16.0
Heating Range	kW	0.6 to 5.4	2.5 to 6.3	0.6 to 7.1	3.6 to 9.0	4.0 to 12.5	4.0 to 16.0	4.0 to 17.0	4.0 to 18.0	4.0 to 18.0	4.0 to 20.0
C.O.P (Energy Label)		4.09 (A)	3.70 (A)	3.58 (B)	3.79 (A)	3.89 (A)	3.89 (A)	3.71 (A)	3.71 (A)	3.41 (B)	3.41 (B)
Operating Range (Outdoor Air) Cooling	°C DB	-15 to 43									
Operating Range (Outdoor Air) Heating	°C WB	-20 to 20									
INDOOR UNIT		210 x 1070 x 690	210 x 1070 x 690	210 x 1320 x 690	210 x 1320 x 690	250 x 1620 x 690	250 x 1620 x 690	250 x 1620 x 690	250 x 1620 x 690	250 x 1620 x 690	250 x 1620 x 690
Exterior Dimensions (H x W x D)	mm	210 x 1070 x 690	210 x 1070 x 690	210 x 1320 x 690	210 x 1320 x 690	250 x 1620 x 690	250 x 1620 x 690	250 x 1620 x 690	250 x 1620 x 690	250 x 1620 x 690	250 x 1620 x 690
Net Weight	kg	28	28	37	37	49	49	49	49	49	49
Air Volume* (L · M · H · EH)	m ³ /s	0.12-0.15-0.18-0.22	0.12-0.15-0.18-0.22	0.20-0.23-0.30-0.37	0.20-0.23-0.30-0.37	0.35-0.38-0.43-0.47	0.35-0.38-0.43-0.47	0.38-0.43-0.48-0.53	0.38-0.43-0.48-0.53	0.38-0.43-0.48-0.53	0.38-0.43-0.48-0.53
Sound Pressure Level (L / M / H / EH)	dB(A)	37 / 38 / 39 / 46	37 / 38 / 39 / 46	38 / 39 / 41 / 50	38 / 39 / 41 / 51	39 / 41 / 44 / 46	39 / 41 / 44 / 46	43 / 44 / 46 / 50	43 / 44 / 46 / 50	43 / 44 / 46 / 50	43 / 44 / 46 / 50
OUTDOOR UNIT		640 x 800(+71) x 290	640 x 800(+71) x 290	640 x 800(+71) x 290	750 x 880(+88) x 340	1300 x 970 x 370	1300 x 970 x 370	1300 x 970 x 370	1300 x 970 x 370	1300 x 970 x 370	1300 x 970 x 370
Exterior Dimensions (H x W x D)	mm	640 x 800(+71) x 290	640 x 800(+71) x 290	640 x 800(+71) x 290	750 x 880(+88) x 340	1300 x 970 x 370	1300 x 970 x 370	1300 x 970 x 370	1300 x 970 x 370	1300 x 970 x 370	1300 x 970 x 370
Net Weight	kg	45	45	45	60	105	105	105	105	105	105
Sound Pressure Level	dB(A)	50	54	54	51	50	50	50	50	52	52
ELECTRICAL DATA		16	20	20	25	32	20 per phase	32	20 per phase	32	20 per phase
Power Source Rating MCB	A	16	20	20	25	32	20 per phase	32	20 per phase	32	20 per phase
Mains Power To	Outdoor	230V/1ph/50Hz	230V/1ph/50Hz	230V/1ph/50Hz	230V/1ph/50Hz	230V/1ph/50Hz	415V/3ph/50Hz	230V/1ph/50Hz	415V/3ph/50Hz	230V/1ph/50Hz	415V/3ph/50Hz
Interconnecting Wires		3 + E	3 + E	3 + E	3 + E	3 + E	3 + E	3 + E	3 + E	3 + E	3 + E
Running Current - Cooling	A	4.7	7.1	8.7	9.4	12.4	4.1 per phase	17.1	5.6 per phase	22.1	7.3 per phase
Running Current - Heating	A	5.1	7.0	9.4	9.4	12.8	4.2 per phase	16.7	6.3 per phase	20.8	6.9 per phase
Power Input - Cooling	kW	1.02	1.53	1.78	2.11	2.80	2.80	3.86	3.86	4.98	4.98
Power Input - Heating	kW	1.10	1.46	1.87	2.11	2.88	2.88	3.77	3.77	4.69	4.69
Start - Max Run Current	A	5 - 12	5 - 14	5 - 14	5 - 17	5 - 24	5 - 15 per phase	5 - 26	5 - 15 per phase	5 - 26	5 - 15 per phase
INSTALLATION/REFRIGERANT		1/4" (6.35)	1/4" (6.35)	1/4" (6.35)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)
Ref. Piping Size o.d ins (mm)	Liquid	1/4" (6.35)	1/4" (6.35)	1/4" (6.35)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)
	Gas	1/2" (12.7)	1/2" (12.7)	1/2" (12.7)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)
Ref. Max Piping Length	m	30	30	30	50	100	100	100	100	100	100
Vertical Height Difference (Max)											
- Outdoor Unit Above Indoor Unit	m	20	20	20	30	30	30	30	30	30	30
- Outdoor Unit Below Indoor Unit	m	20	20	20	15	15	15	15	15	15	15
Refrigerant Amount Precharged	kg	1.5	1.5	1.5	2.95	4.5	4.5	4.5	4.5	4.5	4.5
- For Pipe Length Up To	m	15	15	15	30	30	30	30	30	30	30
Additional Refrigerant	g/m	20	20	20	60	60	60	60	60	60	60

* If wireless remote controller is used, only 3 fan speeds are available: LOW/MED/HIGH.

TECHNICAL NOTE: The indoor unit comes set-up for use with an IR controller. When using the RC-E5 or RCH-E3 wired controller, please disconnect the IR PCB from the AB connection on the indoor unit.

