

FDF-X hyper inverter

FDF-X (7.1-14.0 kW)

FDF-X: World class energy efficiency and performance is combined with all of the latest advances in commercial air conditioner technology in the FDF-X Hyper Inverter floor standing 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. This completely new model design, together with the extensive 100m pipe length, allows no-fuss, flexible installation options.



Wireless remote control



RCN-KIT3-E (option)

NEW

FDF 71/100/125/140VD

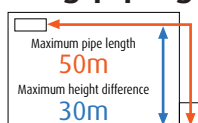


FDC71VNX

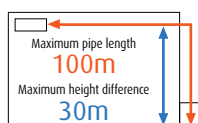


FDC 100/125/140 VN(S)X

Long piping



FDF71VD

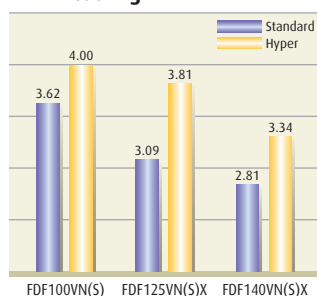


FDF 100/125/140 VD

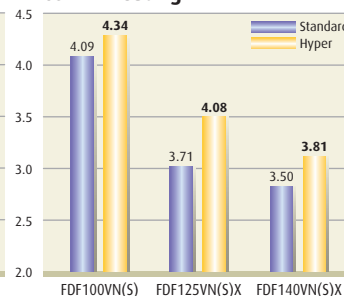
EER and COP levels

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



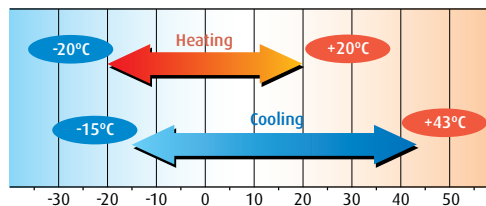
COP in Heating



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

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

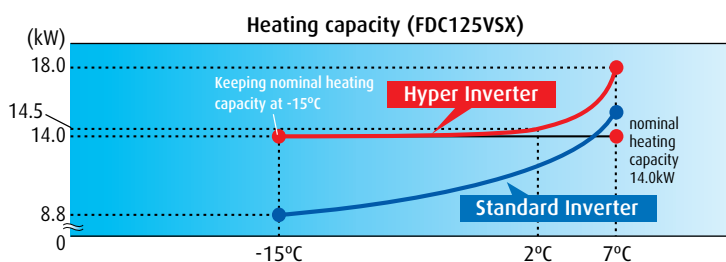
-15°C : Nominal heating capacity maintained at -15°C



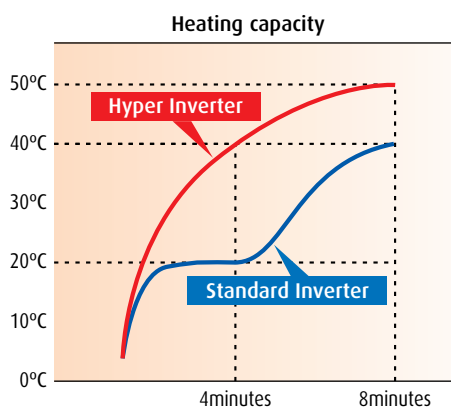
Temperature of supply air can reach 40°C in 4 minutes after start up under low temperature operation conditions (at both indoor and outdoor temperature of 2°C) and can reach 50°C in 8 minutes after that.

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



INDOOR UNIT		FD71VD	FD100VD	FD100VD	FD125VD	FD125VD	FD140VD	FD140VD
OUTDOOR UNIT		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
Cooling (Nominal)	kW	7.1	10.0	10.0	12.5	12.5	14.0	14.0
Cooling Range	kW	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	6.7	9.4	9.4	11.8	11.8	13.2	13.2
UK Sensible Cooling	kW	4.9	7.6	7.6	8.6	8.6	9.3	9.3
E.E.R (Energy Label)		3.21 (A)	3.53 (A)	3.53 (A)	3.21 (A)	3.21 (A)	3.01 (B)	3.01 (B)
Heating (Nominal)	kW	8.0	11.2	11.2	14.0	14.0	16.0	16.0
Heating Range	kW	3.6 to 9.0	4.0 to 12.5	4.0 to 16.0	4.0 to 17.0	4.0 to 17.0	4.0 to 18.0	4.0 to 20.0
C.O.P (Energy Label)		3.62 (A)	3.68 (A)	3.68 (A)	3.61 (A)	3.61 (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								
Exterior Dimensions (H x W x D)	mm	1850 x 600 x 320	1850 x 600 x 320	1850 x 600 x 320	1850 x 600 x 320	1850 x 600 x 320	1850 x 600 x 320	1850 x 600 x 320
Net Weight	kg	49	52	52	52	52	52	52
Air Volume (L - M - H)	m ³ /s	0.23 - 0.27 - 0.30	0.32 - 0.38 - 0.43	0.32 - 0.38 - 0.43	0.32 - 0.38 - 0.43	0.32 - 0.38 - 0.43	0.32 - 0.38 - 0.43	0.32 - 0.38 - 0.43
Sound Pressure Level** (L / M / H)	dB(A)	33 / 35 / 39	44 / 48 / 50	44 / 48 / 50	44 / 48 / 50	44 / 48 / 50	44 / 48 / 50	44 / 48 / 50
OUTDOOR UNIT								
Exterior Dimensions (H x W x D)	mm	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	60	105	105	105	105	105	105
Sound Pressure Level	dB(A)	51	50	50	50	50	52	52
ELECTRICAL DATA								
Power Source Rating MCB	A	25	32	20 per phase	32	20 per phase	32	20 per phase
Mains Power To	Outdoor	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
Running Current - Cooling	A	9.8	12.6	4.2 per phase	17.3	5.7 per phase	20.6	6.8 per phase
Running Current - Heating	A	9.9	13.5	4.5 per phase	17.2	5.7 per phase	20.8	6.9 per phase
Power Input - Cooling	kW	2.21	2.83	2.83	3.89	3.89	4.65	4.65
Power Input - Heating	kW	2.21	3.04	3.04	3.88	3.88	4.69	4.69
Start - Max Run Current	A	5 - 17	5 - 24	5 - 15 per phase	5 - 26	5 - 15 per phase	5 - 24	5 - 15 per phase
INSTALLATION/REFRIGERANT								
Ref. Piping Size o.d. in (mm)	Liquid	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	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	50	100	100	100	100	100	100
Vertical Height Difference (Max)								
- Outdoor Unit Above Indoor Unit	m	30	30	30	30	30	30	30
- Outdoor Unit Below Indoor Unit	m	15	15	15	15	15	15	15
Refrigerant Amount Precharged	kg	2.95	4.5	4.5	4.5	4.5	4.5	4.5
- For Pipe Length Up To	m	30	30	30	30	30	30	30
Additional Refrigerant	g/m	60	60	60	60	60	60	60



Because of our policy of continuous improvement, we reserve the right to make changes in all specifications without notice.