DualTherm G Range

TECHNICAL SPECIFICATIONS

Model		FW-R290CHIL50-3	FW-R290CHIL70-3	FW-R290CHIL100-3
Performance data according to EN 14511				
Power supply		380-415V, 3N~, 50Hz		
Type of refrigerant		R290		
GWP		0.02		
A7/W35 Heating capacity/Power input/COP	kW/kW/COP	17.40~50.00 3.85~10.80/4.52~4.63	30.10~69.50 6.66~16.20/4.29~4.52	39.10~100.00 7.70~21.80/4.59~5.08
A7/W55 Heating capacity/Power input/COP	kW/kW/COP	15.80~48.80 5.70~14.80/2.77~3.30	29.00~69.50 9.38~21.50/3.09~3.23	34.50~97.00 11.10~29.70/3.11~3.27
A2/W35 Heating capacity/Power input/COP	kW/kW/COP	16.50~44.30 4.02~11.69/3.79~4.10	24.60~60.30 6.98~17.29/3.49~3.52	34.00~84.50 8.15~23.00/3.67~4.17
A-7/W35 Heating capacity/Power input/COP	kW/kW/COP	11.60~40.00 4.13~12.75/2.81~3.14	19.10~53.30 7.10~18.30/2.69~2.91	24.10~79.00 8.04~25.90/3.00~3.05
A35/W7 Cooling capacity/Power input/EER	kW/kW/EER	15.50~40.00 4.28~12.80/3.13~3.62	19.10~57.30 6.50~20.00/2.87~2.94	24.50~82.50 8.40~26.40/2.92~3.12
Max power input	kW	24.50	32.00	42.00
Max input current	A	35.80	48.80	64.00
Energy efficiency class 35°C/55°C[1]		A+++/A+++	A+++/A+++	A+++/A+++
Refrigerant charge volume	kg	2.40*2	3.35*2	2.30*4
CO2 equivalent	TON	0.000096	0.000134	0.000184
Type of fan motor		EC Fan Motor		
Fan motor quantity		1	1	2
Sound pressure (1m)	dB(A)	55	59	65
Sound power (Heating)	dB(A)	70	74	80
Operation Pressure(High)	MPa	3.2		
Operation Pressure(Low)	MPa	0.8		
Flow Rate	m^3/h	⩾8.5	⩾11.8	⩾17.0
Waterproof Class		IPX4		
Operation range in heating	°C	-30~43		
Operation range in cooling	°C	15~45		
Net weight	kg	470	580	890
Unit dimension(L*W*H)	mm	1253*1075*2250	1600*1075*2250	2210*1100*2250
Packaging dimension(L*W*H)	mm	1325*1145*2395	1630*1105*2406	2280*1170*2395

1.Scale from A+++ to D.
* For more detailed performance data please refer to the product nameplate.

Efficient Comfort, Built to Adapt

Hydronic heating solutions for both new constructions and retrofit projects

HOTEL

Quiet and reliable heating for multi-room comfort.

APARTMENT

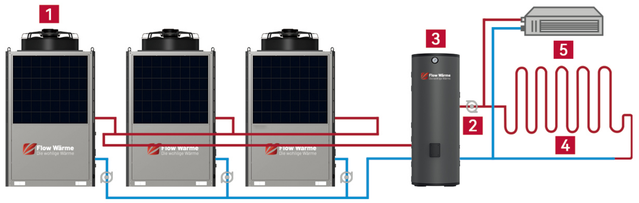
Efficient heating for diverse residential needs.

OFFICE BUILDING

Consistent warmth for productive workspaces.

Application Connection Diagram

Single-Unit Installation



Multi-Unit Parallel Installation

1 Heat pump 2 Water pump 3 Buffer tank 4 Floor heating equipment 5 Fan coil

Flow Wärme

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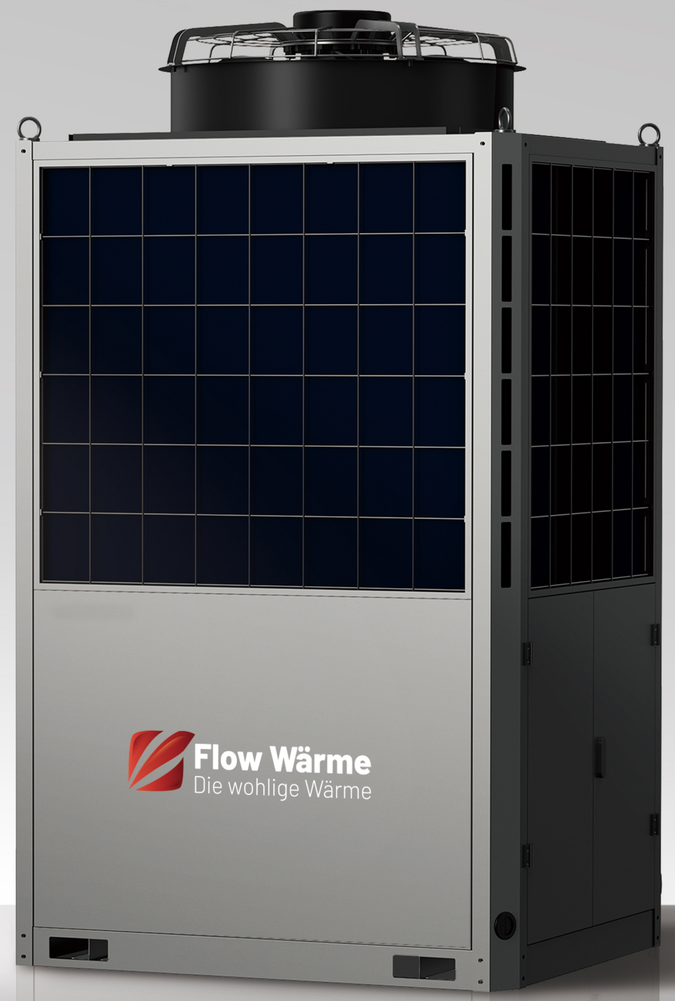
DUALTHERM G RANGE
COMMERCIAL-USE

R290

DUALTHERM SERIES

COMMERCIAL-USE HEAT PUMP

EC Inverter Fan Motor / Cascade Control up to 16 Units
Refrigerant Leakage Detection / IoT Integration



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Smart Control Functions

— Wi-Fi Connectivity

Remote control and monitoring via smartphone or tablet, enabling flexible operation anytime, anywhere.

— Eco-friendly R290 Refrigerant

The Green Choice for a Sustainable Future
Low GWP · Zero ODP · High Efficiency.

— OTA Updates For Keeping Latest Software

Remote firmware upgrade capability ensures continuous optimization of system performance and user experience.

— IoT Integration

Supports intelligent cloud platform access for centralized management and data analysis.

— Cascade Control up to 16 Units

Supports up to 16 units operating in cascade mode for large-scale applications with intelligent load balancing.

Leakage Detector

Equipped with an NDIR sensor, this detector continuously monitors for R290 refrigerant leakage with real-time alerts and ±2.5% detection accuracy, ensuring safety and system compliance in commercial environments.

Anti-Freezing Valve

Integrated with a thermostatic element, this valve automatically discharges water when ambient temperatures fall below 3°C, protecting the hydronic loop from freeze damage.

7-Inch Touchscreen Display

User-friendly 7" full-color touchscreen offers intuitive control and real-time system monitoring, ensuring effortless operation and clear status visualization.

R290 Air-Refrigerant Separator

Removes entrapped air from the R290 refrigeration circuit to maintain optimal system pressure, reducing noise, improving circulation, and avoiding refrigerant migration to indoor space.

Manual Drain Valve

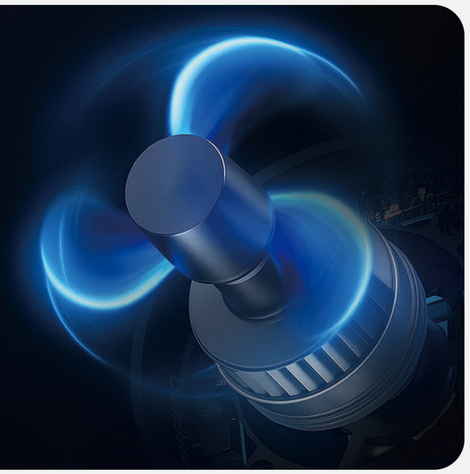
Allows quick and complete drainage of residual water from the system during maintenance, shutdowns, or winter protection, preventing internal corrosion or freeze-related damage.

Refrigerant Relief Valve

Provides overpressure protection by safely releasing refrigerant when pressure exceeds design limits, ensuring component integrity and system safety under extreme operating conditions.

Inverter Compressor with EVI Technology

High-efficiency inverter compressor with Enhanced Vapor Injection (EVI) for reliable performance in low ambient temperatures and improved heating capacity.

EC Inverter Fan Motor

High-performance EC fan motor for precise speed control, low noise, and energy efficiency.