



Heating / cooling unit

Nevada DX

Basic description, dimensions

The wall-mounted Nevada DX units are intended for heating or cooling of air in the shopping, industrial, and warehousing areas or sports halls or workshops. They may be combined with outdoor units of heat pumps from different manufacturers operating on the basis of the R410A or R32 refrigerant.

Basic features

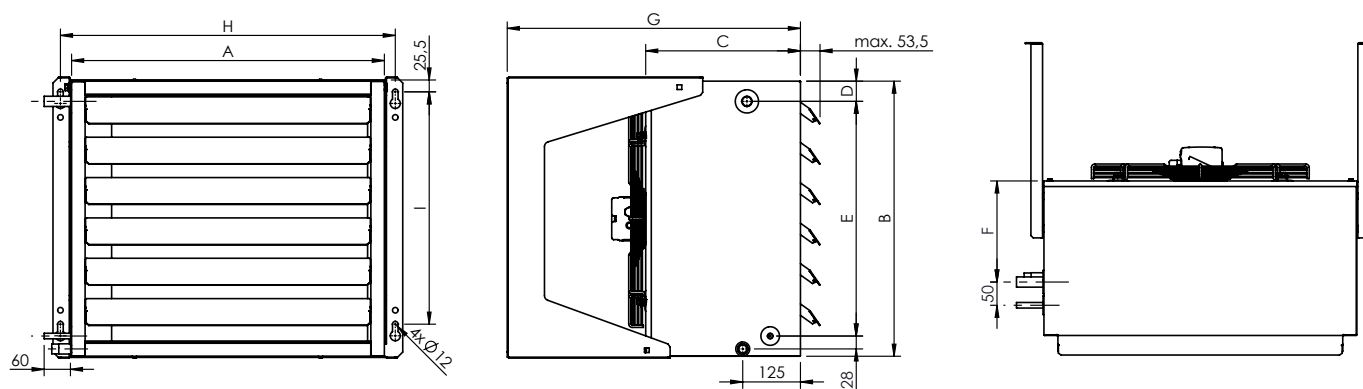
- self-supporting lightweight structure made from zinc-coated metal sheet provides product strength and resistance
- entry-level variant available in zinc-coated version or RAL 9010 powder painting
- wall-mounted AA model with hanging brackets, directionally adjustable exhaust fins in aluminium allow the unit to be adjusted to the optimum position for efficient air distribution in the space
- under-ceiling model with a special HDD adaptor with exhaust nozzles
- highly powerful and maintenance-free EC fans, balanced both statically as well as dynamically with built-in thermocontact to prevent overheating
- air volume 1 900 - 5 250 m³/hour
- heating power 9,1 - 31,7 kW / cooling power 7,7 - 29,0 kW
- the unit uses environmentally-friendly R410A or R32 refrigerant
- integrated drain pan for easy condensate drainage
- IP 54 rating predetermines the unit for use in a heavy-duty industrial setting
- delivery possible without control or the Unireg Ditronic smart control system or basic controller PR 260

Technical data - Nevada DX		Nevada 1 DX AA	Nevada 2 DX AA	Nevada 3 DX AA	Nevada 1 DX HDD	Nevada 2 DX HDD	Nevada 3 DX HDD
		Adaptor AA			Adaptor HDD		
Air volume	[m ³ /h]	1900	3925	5250	1425	3000	4000
Cooling capacity Q_{ch} (Ti=27°C / 50%)	[kW]	7,7	17,9	29	6,5	13,3	20,2
Output temperature (Ta)	[°C]	18,1	17,6	16,1	17,2	17,4	16,4
Pressure loss	[kPa]	3,1	11,8	25,2	2,2	3,7	6,7
Evaporating temperature	[°C]	6	6	6	6	6	6
Heating temperature Qt (Ti=20°C / 50%)	[kW]	9,1	19,9	31,7	7,7	17,1	26,9
Output temperature (Ta)	[°C]	34,1	34,9	37,7	35,8	36,7	39,7
Pressure loss	[kPa]	0,9	1,7	3,5	0,7	1,3	2,6
Condensing temperature	[°C]	45	45	45	45	45	45
Connection pipes (liquid-gas)	[mm]	10 / 18	12 / 22	12 / 28	10 / 18	12 / 22	12 / 28
Outdoor unit		AOYG36KRTA	AOYG72LRLA	AJY108LELDH	AOYG36KRTA	AOYG36KRTA	AOYG72LRLA
EC fan							
power consumption	[W]	165	400	345	165	400	345
nominal current	[A]	1,35	2,6	2,2	1,35	2,6	2,2
fan voltage	[V]	230	230	230	230	230	230
IP rating		IP54	IP54	IP54	IP54	IP54	IP54
Refrigerant		R32	R410A	R410A	R32	R410A	R410A
Acoustic pressure Lp(A) in the distance 5m	[db(A)]	58	60	56	52	54	50
Weight	[kg]	22	31	48	39	54	83

Product noise level measurement:

- test standards: CSN EN ISO 1996-1, CSN EN ISO 1996-2, and CSN EN ISO 3746
- description of measurement: at distances of 5 m from the unit front, height 1.1 m (±0.1) above the floor, microphone axis directs against the unit out of air flow
- conditions of measurement: free space 30x60x7m

The under-ceiling heating/cooling units with the HDD exhaust nozzle are an ideal solution for industrial environment where effective heating or cooling of spaces with higher ceilings is required. The adaptor fitted on the exhaust nozzle efficiently distributes temperature-adjusted air from the ceiling down to the floor level, which uniformly and in a target way heats the whole air volume of said space in no time. This minimizes uneven temperature differences in the hall, comfortable working temperature for the employees is achieved, and energy loss and operating costs are reduced.

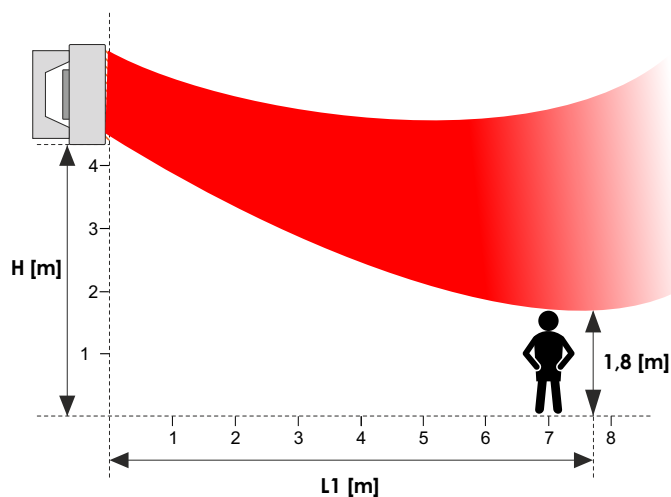


DIMENSIONS NEVADA DX AA

	A	B	C	D	E	F	G	H	I
NEVADA 1 DX AA	530	470	300	45	375	200	600	570	380
NEVADA 2 DX AA	680	600	335	45	505	230	630	720	500
NEVADA 3 DX AA	875	750	370	45	655	270	720	915	650

Air flow reach scheme
A model example

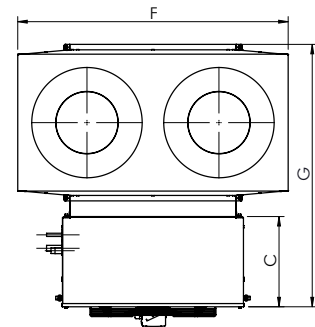
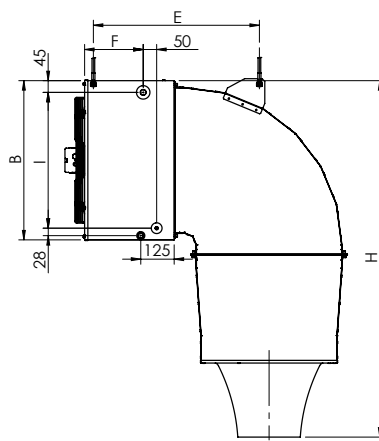
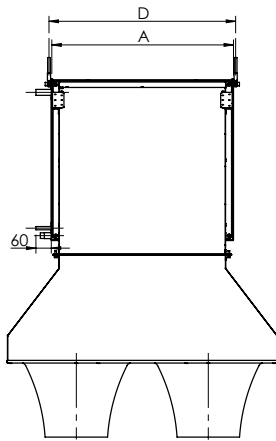
	Nevada 1 DX AA		Nevada 2 DX AA		Nevada 3 DX AA	
	H [m]	L1 [m]	H [m]	L1 [m]	H [m]	L1 [m]
Temperature difference $\Delta T_a - \Delta T_i = 5^\circ\text{C}$	4,5	9,7	4,8	10,3	4,8	10,2
Temperature difference $\Delta T_a - \Delta T_i = 10^\circ\text{C}$	3,9	7,2	4,2	7,7	4,1	7,6
Temperature difference $\Delta T_a - \Delta T_i = 15^\circ\text{C}$	3,6	5,8	3,8	6,2	3,8	6,2
Temperature difference $\Delta T_a - \Delta T_i = 20^\circ\text{C}$	3,4	4,9	3,6	5,3	3,5	5,2



Nevada 2 DX AA
(Temperature difference $\Delta T_a - \Delta T_i = 10^\circ\text{C}$)

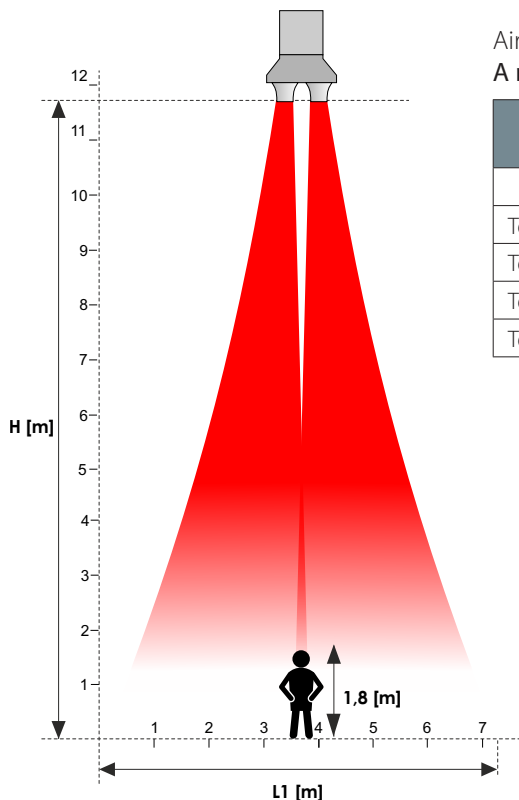
NEVADA DX HDD

The under-ceiling heating/cooling units with the HDD exhaust nozzle are an ideal solution for industrial environment where effective heating or cooling of spaces with higher ceilings is required. The adaptor fitted on the exhaust nozzle efficiently distributes temperature-adjusted air from the ceiling down to the floor level, which uniformly and in a target way heats the whole air volume of said space in no time. This minimizes uneven temperature differences in the hall, comfortable working temperature for the employees is achieved, and energy loss and operating costs are reduced.



DIMENSIONS NEVADA DX HDD

	A	B	C	D	E	F	G	H	I
NEVADA 1 DX HDD	530	470	300	545	530	835	835	1150	375
NEVADA 2 DX HDD	680	600	335	695	620	1005	975	1325	505
NEVADA 3 DX HDD	875	750	370	890	745	1005	1305	1515	655



Air flow reach scheme
A model example

	Nevada 1 DX HDD		Nevada 2 DX HDD		Nevada 3 DX HDD	
	H [m]	L1 [m]	H [m]	L1 [m]	H [m]	L1 [m]
Temperature difference $\Delta T_a - \Delta T_i = 5^\circ\text{C}$	12,8	7,8	17,7	10,8	15,7	9,6
Temperature difference $\Delta T_a - \Delta T_i = 10^\circ\text{C}$	8,5	5,3	11,8	7,3	10,5	6,6
Temperature difference $\Delta T_a - \Delta T_i = 15^\circ\text{C}$	6,8	4,3	9,5	6	8,4	5,4
Temperature difference $\Delta T_a - \Delta T_i = 20^\circ\text{C}$	5,8	3,7	8	5,1	7,1	4,6

Nevada 2 DX HDD
(Temperature difference $\Delta T_a - \Delta T_i = 10^\circ\text{C}$)

No control is delivered with the Nevada DX units in standard. Integrated EC fans for control via 0-10V signal. The Unireg DIT 2.0 control system may be provided upon request to use MODBUS protocol for control.

UNIREG DIT 2.0

Unireg is the distribution board suitable for control of heating units with EC motors for 230V where integration of the controller into the unit is not possible. The system permits the use of all functions offered by Ditrionic Touch controllers. Selection of an adequate Unireg model depends on power input of said heating/cooling units (power limitation in "A").



Control type	Unireg DIT 2.0
unit type	230 V
for maximum unit (units) current	14 A
IP rating	IP 20
dimensions (l x h x d)	300 x 400 x 170 mm

Ditrionic Touch controller is fitted with an intelligent processor regulator, designed specifically for comfort and design air curtains that are fitted with AC or EC fans. Due to the units sleek design and readable blue colour screen, it is suitable for most kinds of interior design applications (from a basic type to the more expensive stylish type). The controller offers local control, control from superior system (BMS) or Modbus compatibility. Control connection via cable with connector RJ 45.



Dimensions: l. 125 x h. 90 x d. 32 [mm]
The controller is intended for wall mounting. IP20.

PR 260 wall-mounted controller

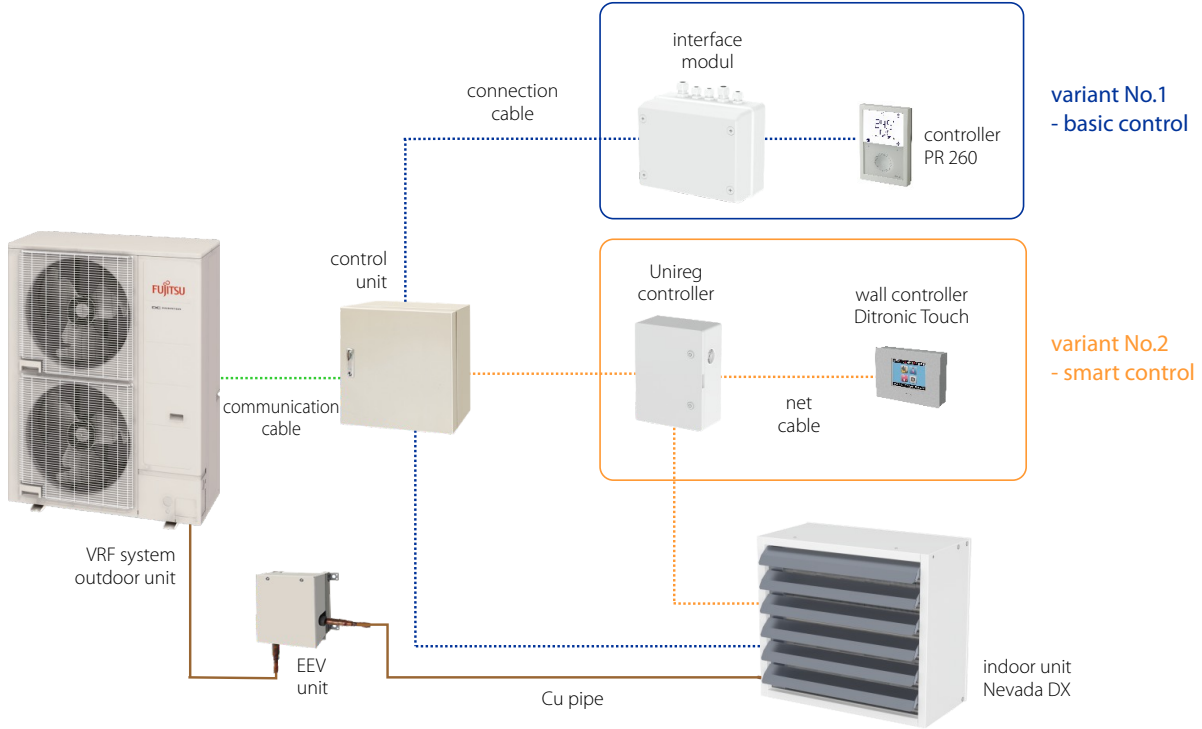
The PR 260 controller is a controller developed for control of heating units with an EC fan. The design and well-arranged display makes the controller suitable for all types of operation (from basic up to comfort interiors). The users have opportunity to control the unit either manually or using some of pre-defined modes.



The controller connects via a cable to the controller terminal board.
Dimensions: w. 125 x h. 90 x d. 32 [mm]
The controller is intended for wall mounting. IP30.

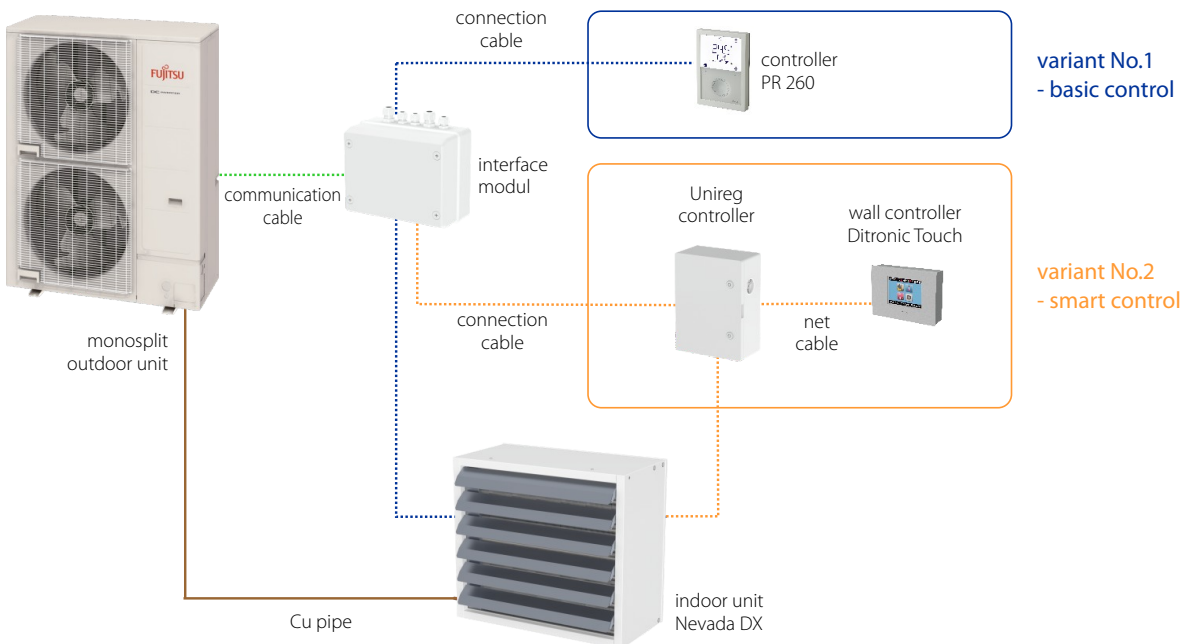
Technological scheme

For units Nevada III 1 DX and Nevada III 2 DX









Technological scheme

For units Nevada III 3 DX



Description of the key functions of the Ditronic Touch 2.0 control and PR 260

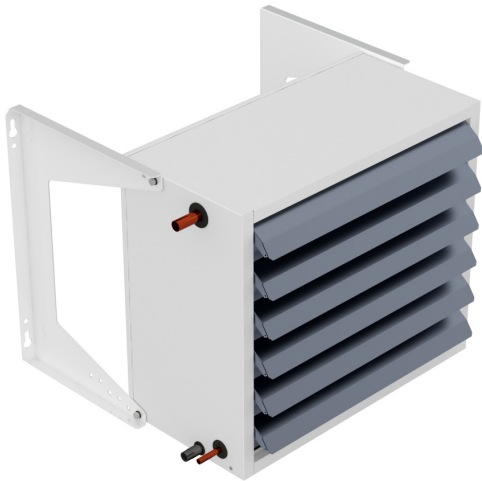
Description of function	Ditronic Touch 2.0	PR 260
 Wall-mounted control panel	✓	✓
 Local fan revolutions control	✓	✓
 ModBUS protocol fan revolutions control	✓	✗
 Fan revolutions control based on outdoor temperature	✓	✗
 Local heating control	✓	✓
 Local cooling control	✓	✓
 Cooling mode selection - ECO1 / ECO2 / COMFORT	✓	✗
 ModBUS protocol heating control	✓	✗
 Heating control based on room or exhaust temperature	✓	✓
 Operation and failure signalling to the superior system	✓	✗
 Week time hours	✓	✓
 Heat up mode selection – winter/summer/combi/off	✓	✓
 Keyboard lock to protect against unintentional change	✓	✓
 MASTER / SLAVE connection	✓	✗
 Optional connection of external contact	✓	✓
 Limiting exterior thermostat	✓	✗
 Device automatic operation	✓	✓
 Valve function configuration for door interlock	✓	✗
 Exhaust and room temperature display, medium temperature display	✓	✓*

*display of room temperature

Accessories

Wall-mounted position adjustable bracket

- a set of two pieces, RAL 9010 or zinc-coated surface finish



Underceiling installation

- underceiling suspension kit



Order key

Nevada III - 1 - DX - AA - EC - RAL 9010

Type of heating / cooling unit

Nevada III - heating / cooling unit name

Air volume

- 1** - Air volume - max 1900 m³/h
- 2** - Air volume - max 3925 m³/h
- 3** - Air volume - max 5250 m³/h

Model

DX - the model with heat exchanger for the R410A or R32 refrigerant for heating and cooling

Adaptor type

AA - wall-mounted, adaptor with adjustable segments
HDD - suspension under ceiling adaptor with the exhaust nozzles

Fan type

EC - EC fan

RAL colour

RAL 9010 - RAL-code
ZN - zinc coated case

Representative: